REQUEST FOR PROPOSALS

FEASIBILITY STUDY FOR THE

MULTI-SECTOR TECHNOLOGY PARK PROJECT

Submission Deadline: **1:00 pm LOCAL TIME**

MONDAY, APRIL 8, 2009

Address: Odilon Monteiro Frazão
Secretaria de Desenvolvimento Econômico do Governo do Distrito FederalSubsecretário de Investimentos e Negócios Internacionais
Centro de Convenções Ulysses Guimaraes, SDC
Eixo Monumental, Lote 5, Ala Norte, 1° andar
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SEALED PROPOSALS SHALL BE CLEARLY MARKED AND RECEIVED PRIOR TO THE TIME AND DATE SPECIFIED ABOVE. PROPOSALS RECEIVED AFTER SAID TIME AND DATE WILL NOT BE ACCEPTED OR CONSIDERED.

REQUEST FOR PROPOSALS

Section 1: INTRODUCTION

The U.S. Trade and Development Agency (USTDA) has provided a grant to conduct the Multi-Sector Technology Park Project on behalf the Government of the Federal District of Brazil acting through the Secretariat for Economic Development and Tourism. The grant agreement is attached at Annex 4 for reference. The Grantee is soliciting technical proposals from qualified U.S. firms to provide expert consulting services to carry out the Feasibility Study.

1.1 BACKGROUND SUMMARY

In the early 1960s, the capital of Brazil moved from Rio to Brasília as a means to promote the development of Brazil's vast interior. Brasília continues to fulfill its fundamental role of promoting development in the heartland, as evidenced by the rapid economic growth of the center-west region and the per capita income of Brasília, which is the highest in the country. The Government of the Federal District of Brasília (known by its Portuguese acronym "GDF") is prioritizing investments that support sustainable economic development in the region and that capitalize upon Brasília's scientific, technological and educational resources. A particular focus for GDF is on information technology, which has been crucial in generating innovation, attracting foreign investment, and contributing to Brazil's overall economic growth.

As a result of a March 2008 USTDA trip to Brasília, GDF has requested USTDA assistance for a feasibility study to develop a multi-sector technology park for Brasília. A goal of the park is to make the required IT infrastructure readily available and at the lowest possible cost. The technology park will provide common services and resources to high-technology and research and development companies (with an emphasis on biotechnology and nanotechnology industries), and encourage cooperation between universities, research institutions, and the private sector. GDF seeks to attract such tenants by providing a solid IT infrastructure at the lowest possible cost.

The feasibility study will provide Brasília with a detailed plan for the design, organization, construction, operation and management of the park. GDF plans to make the technology park a self-sustaining public-private partnership, minimizing the need for investment of public resources to operate the park. Implementation of this project is expected to have a multiplier effect leading to increased investment, technology transfer, and attraction of global companies.

1.2 OBJECTIVE

The objective of this Feasibility Study is to assist the Grantee in evaluating a multi-sector technology park that will foster a favorable environment for innovation in the academic, research and private sectors. The Terms of Reference (TOR) for this Feasibility Study is attached as Annex 5.

1.3 PROPOSALS TO BE SUBMITTED

Technical proposals are solicited from interested and qualified U.S. firms. The administrative and technical requirements as detailed throughout the Request for Proposals (RFP) will apply. Specific proposal format and content requirements are detailed in Section 3.

COST will not be a factor in the evaluation and therefore, cost proposals should not be submitted; upon detailed evaluation of technical proposals, one firm will be selected for contract negotiations. The amount for the negotiated contract has been established by a USTDA grant of U.S. $507,000 dollars.

1.4 CONTRACT FUNDED BY USTDA

The negotiated contract will be funded by USTDA in accordance with the terms and conditions of its grant to the Grantee. The contract must include certain USTDA mandatory clauses relating to nationality, taxes, payment, reporting, and other matters. The USTDA nationality requirements and the USTDA mandatory clauses are attached at Annexes 3 and 4 for reference.

Section 2: INSTRUCTIONS TO PROPOSERS

2.1 PROJECT TITLE

The project is called the "Multi-Sector Technology Park Project"

2.2 DEFINITIONS

Please note the following definitions of terms as used in this RFP.

The term "Request for Proposals" means this solicitation of a formal technical proposal including qualifications statement.

The term "Offeror" means the U.S. individual, or U.S. firm, including any and all subcontractors, which responds to the RFP and submits a formal proposal and which may or may not be successful in being awarded this procurement.

2.3 DEFINITIONAL MISSION REPORT

USTDA sponsored a Definitional Mission to address technical, financial, sociopolitical, environmental and other aspects of the proposed project. A copy of the Report is attached at Annex 2 for background information only.

2.4 EXAMINATION OF DOCUMENTS

Offerors should carefully examine this RFP. It will be assumed that Offerors have done such inspection and that through examinations, inquiries and investigation they have become familiarized with local conditions and the nature of problems to be solved during the execution of the Feasibility Study.

Offerors shall address all items as specified in this RFP. Failure to adhere to this format may disqualify an Offeror from further consideration.

Submission of a proposal shall constitute evidence that the Offeror has made all the above mentioned examinations and investigations, and is free of any uncertainty with respect to conditions which would affect the execution, and completion of the Feasibility Study.

2.5 PROJECT FUNDING SOURCE

The Feasibility Study will be funded under a grant from USTDA. The total amount of the grant is not to exceed U.S. $ 507,000 dollars.

2.6 RESPONSIBILITY FOR COSTS

Offeror shall be fully responsible for all costs incurred in the development and submission of the proposal or any other cost incurred by Offeror prior to issuance of an agreement or contract. Neither USTDA nor the Grantee assumes any contractual obligation as a result of the issuance of this proposal request, the preparation or submission of a proposal by an Offeror, the evaluation of proposals, or final selection.

2.7 TAXES

Offerors should submit proposals which note that in Annex 4, USTDA Mandatory Contract Provisions, USTDA funds are not to be used to pay taxes or duties under the laws of host country.

2.8 CONFIDENTIALITY

The Grantee will use its best efforts to preserve the confidentiality of any business proprietary or confidential information submitted by the Offeror, which is clearly designated as such by the Offeror.

2.9 ECONOMY OF PROPOSALS

Proposal documents should be prepared simply and economically, providing a comprehensive and concise description of the Offeror's capabilities to satisfy the requirements of the RFP. There is no necessity for expensive bindings, colored displays, or other promotional material unless such material is absolutely pertinent to the proposal. Emphasis should be placed on completeness and clarity of content.

2.10 SUBSTANTIVE PROPOSALS

The Offeror shall certify (a) that its proposal is genuine and is not made in the interest of, or on the behalf of, any undisclosed person, firm, or corporation, and is not submitted in conformity with, and agreement of, any undisclosed group, association, organization, or corporation; (b) that it has not directly or indirectly induced or solicited any other Offeror to put in a false proposal; (c) that it has not solicited or induced any other person, firm, or corporation to refrain from submitting a proposal; and (d) that it has not sought by collusion to obtain for himself any advantage over any other Offeror or over the Grantee or USTDA or any employee thereof.

2.11 CONDITIONS REQUIRED FOR PARTICIPATION

Only U.S. firms are eligible to participate in this tender. However, U.S. firms may utilize subcontractors from host country for up to 20 percent of the amount of the USTDA grant. USTDA nationality requirements are detailed in Annex 3.

2.12 LANGUAGE OF PROPOSAL

All proposal documents shall be prepared and submitted in English and Portuguese.

2.13 PROPOSAL SUBMISSION REQUIREMENTS

The **Cover Letter** in the proposal must be addressed to:

Address: Secretaria de Desenvolvimento Econômico do Governo do Distrito Federal
Subsecretário de Investimentos e Negócios Internacionais
Centro de Convenções Ulysses Guimaraes, SDC
Eixo Monumental, Lote 5, Ala Norte, 1° andar
Brasília - DF CEP 70070-350
Brazil

Phone: 011 55 (61) 3325-2427

An Original in English and Portuguese and two (2) copies in each language of your proposal must be received at the above address no later than 1:00 pm (local time), on April 8, 2009.

Proposals may be either sent by mail, overnight courier, or hand-delivered. Whether the proposal is sent by mail, courier or hand-delivered, the Offeror shall be responsible for actual delivery of the proposal to the above address before the deadline. Any proposal received after the deadline will be returned unopened.

Upon timely receipt, all proposals become the property of the Grantee.

2.14 PACKAGING

Each proposal must be sealed to ensure confidentiality of the information. The proposals should be individually wrapped and sealed, and labeled for content including "original" or "copy number x"; the original in English and Portuguese and two (2) copies in each language should be collectively wrapped and sealed, and clearly marked for content.

Neither USTDA nor the Grantee will be responsible for premature opening of proposals not properly labeled.

2.15 AUTHORIZED SIGNATURE

The proposal must contain the signature of a duly authorized officer or agent of the Offeror empowered with the right to bind the Offeror.

2.16 EFFECTIVE PERIOD OF PROPOSAL

The proposal shall be binding upon the Offeror for sixty (60) days after the proposal due date, and Offeror may withdraw or modify this proposal at any time prior to the due date upon written request, signed in the same manner and by the same person who signed the original proposal.

2.17 EXCEPTIONS

Firms agree by their response to the RFP announcement to abide by the procedures set forth therein. Material modifications in the TOR or responsibilities of the parties will not be accepted.

Any exceptions in the proposal shall be clearly identified, and shall include the scope of such exception, and its impact, on the procurement. The Grantee shall make final determination as to the responsiveness of such exceptions and their acceptability.

2.18 OFFEROR QUALIFICATIONS

As provided in Section 3, Offerors shall submit evidence that they have relevant past experience and have previously delivered advisory and Feasibility Study services similar to those required in the TOR.

2.19 RIGHT TO REJECT PROPOSALS

The Grantee reserves the right to reject any and all proposals and to accept or reject any or all of the items in the proposal, and to award the contract in whole or in part if it is deemed in the best interest of the Grantee.

2.20 PRIME CONTRACTOR RESPONSIBILITY

Offerors have the option of subcontracting parts of the services they propose. The Offeror's proposal must include a description of any anticipated subcontracting arrangements, including the name, address, and qualifications of consultants and subcontractors. USTDA nationality provisions are set forth in detail in Annex 3. The successful Offeror shall cause appropriate provisions of its contract, including all mandatory USTDA clauses, to be inserted in all subcontracts ensuing to ensure fulfillment of all contractual provisions by subcontractors.

2.21 AWARD

An award resulting from this RFP shall be made to the best qualified Offeror, taking into consideration the evaluation factors set forth herein; however, the right is reserved to reject any and all proposals received and, in all cases, the Grantee will be the judge as to whether a proposal has or has not satisfactorily met the requirements of this RFP.

2.22 COMPLETE SERVICES

The successful Offeror shall be required to (a) furnish all supplies, supervision, transportation, and other execution accessories, services, and facilities; (b) provide and perform all necessary labor; and (c) in accordance with good technical practice, with due diligence, and in accordance with the requirements, stipulations, provisions and conditions of this RFP and the resultant contract, execute and complete all specified work to the satisfaction of the Grantee.

2.23 INVOICING AND PAYMENT

Deliverables under the contract shall be delivered on a schedule to be agreed upon in a contract with the Grantee. The Contractor may submit invoices to the designated Grantee Project Director in accordance with a schedule to be negotiated and included in the contract. Upon approval of each invoice, the Grantee will forward the invoice to USTDA which will process payment to the Contractor. All payments by USTDA under the Grant Agreement will be made in U.S. currency.

Section 3: PROPOSAL FORMAT AND CONTENT

To expedite proposal review and evaluation, and to assure that each proposal receives the same orderly review, all proposals must follow the format described in this section.

Proposal sections and pages shall be appropriately numbered and the proposal shall include a Table of Contents. Offerors are encouraged to submit concise and clear responses to the RFP. Proposals shall contain all elements of information requested without exception. Instructions regarding the required scope and content are given in this section. The Grantee reserves the right to include any part of the selected proposal in the final contract.

The proposal shall consist of a technical proposal only. No cost proposal is required as the value of the USTDA grant is established at U.S. $507,000 dollars.

Offerors shall submit one (1) original in English and Portuguese and two (2) copies of the proposal in each language. Proposals received by fax cannot be accepted.

The following sections and content are required for each proposal:

Transmittal Letter,
Cover/Title Page,
Table of Contents,
Introduction and Executive Summary,
Company Information,
Organizational Structure, Management Plan, and Key Personnel,
Technical Approach and Work Plan,
Experience and Qualifications, and
Miscellaneous.

Detailed requirements and directions for the preparation of each section are presented below.

3.1 SECTION 1: INTRODUCTION AND EXECUTIVE SUMMARY

An Executive Summary should be prepared describing the major facts or features of the proposal, including any conclusions, assumptions, and generalized recommendations the Offeror desires to make. Offerors are requested to make every effort to limit the length of the Executive Summary to no more than five (5) pages.

3.2 SECTION 2: COMPANY INFORMATION

3.2.1 Company Profile

Provide the information listed below relative to the Offeror's firm. If the Offeror is proposing to subcontract some of the proposed work to another firm(s), similar information must be provided for each subcontractor. Offerors are requested to limit the length of the Company Profile Information to one (1) page per firm.

1. Name of firm and business address, including telephone and fax numbers.

2. Year established (include former firm names and year established, if applicable).

3. Type of ownership and parent company, if any.

4. Project Manager's name, address, telephone and fax number, if different from (1).

3.2.2 Offeror's Authorized Negotiator

Provide name, title, address, telephone and fax number of the Offeror's authorized negotiator. The person cited shall be empowered to make binding commitments for the Offeror and its subcontractors, if any.

3.2.3 Negotiation Prerequisites

1. Discuss any impact of any current or anticipated commitments which may impact the ability of the Offeror or its subcontractors to complete the Feasibility Study as proposed and within the project schedule.

2. Identify any specific information which is needed from the Grantee before commencing contract negotiations.

3.3 SECTION 3: ORGANIZATIONAL STRUCTURE, MANAGEMENT, AND KEY PERSONNEL

Describe the Offeror's proposed project organizational structure. Discuss how the project will be managed including the principal and key staff assignments for this Feasibility Study. Identify the Project Manager who will be the individual responsible for this project. The Project Manager must have the responsibility and authority to act on behalf of the Offeror in matters related to the proposed Feasibility Study.

Provide a listing of personnel (including subcontractors and consultants) to be engaged in the project, either U.S. or local with the following information for key staff: position in the project; pertinent experience, curriculum vitae; other relevant information. If subcontractors are to be used, the organizational relationship between the firms must be described.

A manpower schedule and the level of effort for the project period, by activities and tasks, as detailed under the Work Plan shall be submitted. A statement confirming the availability of the proposed project manager and key staff over the duration of the project must be included in the proposal.

3.4 SECTION 4: TECHNICAL APPROACH AND WORK PLAN

Describe in detail the proposed technical approach and work plan. Discuss the project requirements as perceived by the Offeror. Include a brief narrative of tasks within each activity series. Begin with the information gathering phase and continue through delivery and approval of all required reports.

Prepare a detailed schedule of performance that describes all activities and tasks within the Technical Work Plan, including periodic reporting or review points, incremental delivery dates, and other project milestones.

Based on the Technical Work Plan, and previous project experience, explain when and where Offeror will require support from the Grantee. Detail the amount of staff time required by the Grantee or participating agencies and any work space or facilities needed to complete the Feasibility Study.

3.5 SECTION 5: EXPERIENCE AND QUALIFICATIONS

Provide a discussion of the Offeror's experience and qualifications which are relevant to the objectives and TOR for the Feasibility Study. If a subcontractor(s) is being used, similar information must be provided for the prime and each subcontractor firm proposed for the project. Relevant experience and qualifications of key staff proposed shall be provided including letters of commitment from the individuals proposed concerning their availability for contract performance.

As many as possible but not more than six (6) relevant and verifiable project references must be provided, including the following information:

Project name,
Name and address of client (indicate if joint venture),
Client contact person (name/ position/ current phone and fax numbers),
Period of Contract,
Description of services provided,
Dollar amount of Contract, and
Status and comments.

Offerors are strongly encouraged to include in their experience summary primarily those projects that are similar to or larger in scope than the Feasibility Study as described in this RFP.

Section 4: AWARD CRITERIA

Individual proposals will be initially evaluated by a Procurement Selection Committee of representatives from the Grantee. The Committee will then conduct a final evaluation and completion of ranking of qualified Offerors, and the Grantee shall promptly negotiate a contract with the best qualified Offeror. If a satisfactory contract cannot be negotiated with the best qualified Offeror, negotiations will be formally terminated. Negotiations shall then be undertaken with the second most qualified Offeror and so forth.

The selection of the Contractor will be based on the following criteria:

Technical Expertise (30 points): Firm and team's experience (including detailed resumes) in:

Technology park specialists

- Experience in the design, construction, and management of technology parks and related facilities.

Specialist in Brazilian public budget finance project analysis

- Knowledgeable in Brazilian public budget finance, competitive bidding and public contracts

Specialist in project analysis

- Expertise in the economic and financial analysis of projects and feasibility studies involving high technology industries and technology parks

Economists

- Expertise in urban and regional planning
- Expertise in analyzing economic impact of high-technology industries

Work Plan and Methodology (40 points): Adequacy of the proposed work plan and suggested overall approach in responding to the Terms of Reference. Soundness and thoroughness of the technical approach and work plan sections of the proposal, and overall quality of proposal presentation will be evaluated. The proposal should also provide an organization chart of key personnel with their qualifications, and a staffing schedule for each key activity.

Regional Experience (20 points): Firm and team's familiarity with technology park design, construction and management in Brazil and Latin America and experience working with local authorities, as well as familiarity with local regulations.

Financial Experience (10 points): Firm and team's experience in project financing and cost estimating. Specific experience with the identification of financing mechanisms, project financing and experience structuring finance for projects in Brazil and Latin American markets. The feasibility study would provide options for the construction, operation and management of the multi-sector technology park, with a view to making it as self-sustaining as possible,

minimizing the need for investment of public resources by enlisting private sector firms to undertake most if not all of the required investments to mobilize the current revenues needed to operate the center.

Proposals which do not include all requested information may be considered non-responsive.

Price will not be a factor in contractor selection.

ANNEX 1

Secretaria de Desenvolvimento Econômico do Governo do Distrito Federal, Subsecretário de Investimentos e Negócios Internacionais, Centro de Convenções Ulysses Guimaraes, SD, Eixo Monumental, Lote 5, Ala Norte, 1° andar, Brasília - DF CEP 70070-350, Brazil, Phone: 011 55 (61) 3325-2427, Fax: 011 55 (61) 3321-3167.

B - Brazil: MULTI-SECTOR TECHNOLOGY PARK PROJECT

POC John Kusnierek, USTDA, 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901, Tel: (703) 875-4357, Fax: (703) 875-4009. MULTI-SECTOR TECHNOLOGY PARK PROJECT. The Grantee invites submission of qualifications and proposal data (collectively referred to as the "Proposal") from interested U.S. firms which are qualified on the basis of experience and capability to develop a feasibility study aimed at assessing the technical and financial viability of a multi-sector technology park in Brasília, Brazil. The study will provide Brasília with a detailed plan for the design, organization, construction, operation and management of the park.

The U.S. firm selected will be paid in U.S. dollars from a $507,000 grant to the Grantee from the U.S. Trade and Development Agency (USTDA).

A detailed Request for Proposals (RFP), which includes requirements for the Proposal, the Terms of Reference, and a background definitional mission report are available from USTDA, at 1000 Wilson Boulevard, Suite 1600, Arlington, VA 22209-3901. To request the RFP in PDF format, please go to https://www.ustda.gov/USTDA/FedBizOpps/RFP/rfpform.asp. Requests for a mailed hardcopy version of the RFP may also be faxed to the IRC, USTDA at 703-875-4009. In the fax, please include your firm's name, contact person, address, and telephone number. Some firms have found that RFP materials sent by U.S. mail do not reach them in time for preparation of an adequate response. Firms that want USTDA to use an overnight delivery service should include the name of the delivery service and your firm's account number in the request for the RFP. Firms that want to send a courier to USTDA to retrieve the RFP should allow one hour after faxing the request to USTDA before scheduling a pick-up. Please note that no telephone requests for the RFP will be honored. Please check your internal fax verification receipt. Because of the large number of RFP requests, USTDA cannot respond to requests for fax verification. Requests for RFPs received before 4:00 PM will be mailed the same day. Requests received after 4:00 PM will be mailed the following day. Please check with your courier and/or mail room before calling USTDA.

Only U.S. firms and individuals may bid on this USTDA financed activity. Interested firms, their subcontractors and employees of all participants must qualify under USTDA's nationality requirements as of the due date for submission of qualifications and proposals and, if selected to carry out the USTDA-financed activity, must continue to meet such requirements throughout the duration of the USTDA-financed activity. All goods and services to be provided by the selected firm shall have their nationality, source and origin in the U.S. or host country. The U.S. firm may use subcontractors from the host country for up to 20 percent of the USTDA grant amount. Details of USTDA's nationality requirements and mandatory contract clauses are also included in the RFP.

Interested U.S. firms should submit their Proposal in English and Portuguese directly to the Grantee by 1:00pm (local time), April 8, 2009 at the above address. Evaluation criteria for the Proposal are included in the RFP. Price will not be a factor in contractor selection, and therefore, cost proposals should NOT be submitted. The Grantee reserves the right to reject any and/or all Proposals. The Grantee also reserves the right to contract with the selected firm for subsequent work related to the project. The Grantee is not bound to pay for any costs associated with the preparation and submission of Proposals.

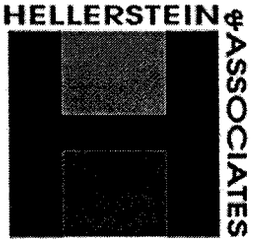
ANNEX 2

Definitional Mission to Evaluate ICT Projects in Brazil: Volume 2: Multi-Sector Technology Park

Final Report

Submitted by

Hellerstein & Associates



September 2008

This report was funded by the U.S. Trade Development Agency (USTDA), an agency of the U.S. Government. The opinions, findings, conclusions, or recommendations expressed in this document are those of the author(s) and do not necessarily represent the official position or policies of USTDA. USTDA makes no representation about, nor does it accept responsibility for, the accuracy or completeness of the information contained in this report.

The U.S. Trade and Development Agency

The U.S. Trade and Development Agency (USTDA) advances economic development and U.S. commercial interests in developing and middle income countries. The agency funds various forms of technical assistance, feasibility studies, training, orientation visits and business workshops that support the development of a modern infrastructure and a fair and open trading environment.

USTDA's strategic use of foreign assistance funds to support sound investment policy and decision-making in host countries creates an enabling environment for trade, investment and sustainable economic development. Operating at the nexus of foreign policy and commerce, USTDA is uniquely positioned to work with U.S. firms and host countries in achieving the agency's trade and development goals. In carrying out its mission, USTDA gives emphasis to economic sectors that may benefit from U.S. exports of goods and services.

TABLE OF CONTENTS

GOVERNMENT OF THE FEDERAL DISTRICT MULTISECTORAL TECHNOLOGY PARK

I. INTRODUCTION

Juscelino Kubitschek, President of Brazil from 1955 through 1960, was a visionary who developed and implemented a Plan of Goals and called for "fifty years of progress in five". That plan was centered on investment in such priority sectors as infrastructure (roads, electric energy production and distribution, and industry). The construction of a new capital, Brasília, was a goal which in a way summarized the whole plan – it was built in the center of the country and intended to promote national integration and the development of Brazil's vast interior. Hitherto Brazil's development had been concentrated on its long Atlantic coastline and a band reaching about two hundred kilometers inland. The new capital forced the relocation of a large contingent of civil servants and supporting service industries and spurred the opening of new highways and other infrastructure investments that resulted in greater national economic integration.

Knowledge and innovation have always been important drivers of human and economic development within Brazil, and they have taken on a larger role in recent decades with the acceleration of technological change and globalized communication and trade. According to a recent report on Brazil and the Knowledge Economy[1], public investment in R&D needs to be made more effective, not just by producing more knowledge and technology but also by providing the infrastructure to commercialize and disseminate new knowledge (for example, technology parks, technology transfer offices, business incubators, and venture capital operations).

Brasília continues to fulfill its fundamental role of promoting the development of Brazil's heartland, as shown by the rapid economic growth of the Center-West Region and the per capita of the Federal District.

To support this mission of being an agent to promote economic development, the Federal District has a number of resources, such as the best network of public schools in Brazil, universities of national reputation, the highest Human Development Index in Brazil – all of which contribute to making the federal capital an ideal location for businesses producing high quality goods and services with high value added. Thus the Federal District has a special vocation to be a strategic location for establishing a Multisector Technology Park (MTP) that will help attract investments and encourage technology transfer.

In Brazil, the information technology (IT) industries have been one of the most important for generating innovation, for attracting foreign investment and for explaining the high economic growth. Many countries, Brazil included, have looked to copy the example of India since the early 1990s. [2]Although it is difficult to completely describe all the factors that accounted for the boom in the exports of IT services in India, there is a certain consensus that two of them were crucial: a much more liberal policy for the import of equipment (hardware) when compared to the earlier protectionism that had characterized the sector; and the creation in 1988 of the Software Technology Parks which had a strong foreign orientation.

[1]Alberto Rodriguez, Carl Dahlman, Jamil Salmi, editors, Knowledge and Innovation for Competitiveness in Brazil, WBI Development Studies, World Bank 2008

[2] André Nassif, National innovation system and Macroeconomic policies: Brazil and India In comparative perspective, Decision Papers #184, UNCTAD, May 2007

II. RATIONALE

Technology Parks have a history dating back to the construction of the Stanford Industrial Park in 1951. Now known as Stanford Research Park, it was the first university-owned industrial park at the time of its founding and played a key role in creation of Silicon Valley. Early tenants included Hewlett-Packard, General Electric, and Lockheed. It is now run by the Stanford Management Company which was established in 1991 to manage the university's financial and real estate assets. The park's 162 buildings hold 23,000 employees who work for 140 different companies.[3] Since then thousands of Technology Parks have been established around the world that seek to enhance the competitiveness of companies and entrepreneurs of their cities and regions, and contribute to global economic development through innovation, entrepreneurship, and the transfer of knowledge and technology.

According to Infodev, business incubation emerged as an economic development tool in the early and mid 1980s, first in the US and later in Europe, subsequently spreading around the world. Today, it is estimated that about 5,000 business incubators in the world, depending on definitions and without accurate 'audit' data, of which at least 1,000 are in Asia (approximately half in China), 1,000 in North America, 900 in Europe and close to 400 in Latin America.

There is a worldwide network of science and technology parks organized as the International Association of Science Parks (IASP - www.iasp.ws). According to IASP, science and technology parks "promote the economic development and competitiveness of regions and cities by:

- Creating new business opportunities and adding value to mature companies
- Fostering entrepreneurship and incubating new innovative companies
- Generating knowledge-based jobs
- Building attractive spaces for the emerging knowledge workers
- Enhancing the synergy between universities and companies."

The IASP holds international conferences (one is being held 19-24 September 2008 in South Africa), and a number of presentations will be made by Brazilians. These conferences are major worldwide events where professionals meet, exchange knowledge and information, establish alliances and develop new joint projects. ANPROTEC, the Brazilian Association of Business Incubators and Technology Parks (www.anprotec.org.br) is an Associate Member of IASP, and received a grant from the *Info*Dev Program of the World Bank to strengthen the Latin America Network of Science Parks and Business Incubators Associations (RELAPI) by supporting the consolidation of its mission and advancement of its objectives in the region.

The more successful science and technology parks are close to and associated with universities and/or research institutes and usually have associated enterprise incubators. A wide range of ownership and arrangements exist, often associating governments, private sector enterprises and organizations, and universities.

The Government of the Federal District (GDF) and of its Secretariat of Economic Development and Tourism (SDET/DF) are developing public policies that encourage investment in priority sectors to induce sustainable economic development – sectors such as education, health, infrastructure, energy, transport, logistics, water supply, sewage, and simplification of bureaucratic procedures.

The wide-ranging administrative reform begun in 2007, after the elections, has resulted in savings of a billion *reais* per year to be invested in new projects, allowing the Federal District to develop modern marketing channels to assure the sustainability of economic activities. Following this

[3] http://en.wikipedia.org/wiki/Stanford_Research_Park.

policy, SDET/DF sees the need to promote economic feasibility studies for the design and execution of projects.

Technology Parks are a recent feature in Brazil and have predominantly been initiatives spurred on by universities. A few parks focused specifically on a certain area of performance or research (e.g. software), while others combined this focus with that of an incubator. It is these incubator sections that are fostering growth of the parks, recruiting predominantly micro and small companies, though most science and technology parks seek to recruit "anchor" tenants, usually large multinational and Brazilian companies. "Incubators" nuture start-ups (often launched by research scientists from associated universites or research institutes), provide common services that such small firms cannot themselves afford encourage interaction between scientists (often funded by the public sector) and the personnel of private sector enterprises (including larger firms located in the parks), and seek to ensure that this interaction benefits society at large.

According to the World Bank report, Brazil needs to better manage its public R&D and orient it towards meeting broader economic goals. In Brazil scientists often lack experience or business acumen and easily accessible mechanisms need to be created to meet these goals by translating ideas into viable enterprises. The report promotes the use of publicly-funded incubators in technology parks because the its authors see these incubators and parks as being able to make that essential connection between scientists and the business community. The incubators can play a wide range of roles, from matching scientists with businesspeople who can help develop business to providing services not normally available to small firms and facilitating access to finance. In general incubators in science and technology parks have a higher success rate with startups than those located in universities.

The most successful of Brazil's relatively few technology parks and business incubators are in the states of São Paulo and Rio de Janeiro.[4] Other successful technology parks are in Recife (Porto Digital) whose focus is in Software and in Porto Alegre in Rio Grande do Sul (TECNOPUC PUC-RS Technology Park), which focuses on IT, Energy, Biotech.[5]

Until recently there has been a lack of parks with technology cluster characteristics or with the presence and investment of relevant players to ensure sustainable growth. The needs are for training in entrepreneurship for scientists and engineers (for example, pairing them with business experts), assistance to develop business and marketing plans, access to early-stage innovation finance and venture capital, assistance in protecting intellectual property, and general help in setting up and "growing" businesses.

Also missing is an attractive value proposal (e.g. infrastructure and incentives package) so that the larger-scale players can locate significant operations in these parks. Finally, they are also financing difficulties for companies building new establishments in Brazilian parks.

According to a recent report by AT Kearney on the Brazilian IT market,[6] technology complexes or parks should have four main characteristics:

- Be an agglomeration of companies at different stages of development
- Be integrated with an education and research institution
- Take part in joint business-university innovation

[4] Op Cit Supra at 1, p.132
[5] "Developing and Strategic agenda for the IT Offshoring Outsourcing Sector" Executive Summary, Funded by Brazilian Association of Information Technology and Communication Companies (Brasscom) and written by AT Kearney Inc.
[6] Ibid.

- Have non-profit organizational structure

Specific policies and incentives for developing parks are still insufficient. The Ministry of Science and Technology's National Program for Support of Business Incubators (*Programa Nacional de Apoio a Incubadoras de Empresas* - PNI - http://ftp.mct.gov.br/prog/empresa/pni/Default.htm), has focused on support for planning, creation and consolidation of incubators and companies and technological parks, is likely to be improved.

The proposed MTP would encourage cooperation and synergy between universities, research institutions, and the private sector and creating a favorable environment for innovation, renovation and training. This should contribute to the competitiveness and economic growth of the Federal District. The MTP would help develop a favorable environment for innovation and the exchange of knowledge, generating synergy, cost reduction, and new business opportunities, while promoting competitiveness, interactions among enterprises, and the ability to conduct high technology business through transfer of technology, thereby increasing wealth creation. The GDF will encourage the businesses locating in the MTP to participate in the international market for goods and services and strive to attract new players to the market.

SDET/DF expects that this project will contribute to the development of the Federal District's economy, generating knowledge, employment, and access to new markets. Thus the advantage arising from the high educational indices can become an effective factor of competitiveness, developing initiatives that make possible business activities based on knowledge. In short, the proposed economic feasibility study will contribute to the design and development of an MTP, presenting essential information for this priority project for the economic development of the Federal District.

III. OBJECTIVES OF THE ECONOMIC FEASIBILITY STUDY

The proposed economic, social, technical, and environmental feasibility study for the MTP of the Federal district has the following objectives.

- Estimate the economic, social, technical, and environmental benefits of a MTP in the Federal District that will host businesses engaged in the commercial exploitation of high technology, with activities that include R&D, production and sales.
- Structure a proposal for financing and implementing the project that will be sent to various international financial institutions, to be indicated by the consultancy. The financial proposals will be developed according the standards established by international organizations and/or development banks.

The objective of the MTP Project is to promote the competitiveness of businesses locating within it, developing a knowledge economy generating growth based on the demand for high- value-added services that are intensive in knowledge and innovation. The MTP will promote synergy among firms through providing common services centers, thereby exploiting economies of scale. Specialized business support units will provide businesses with an environment where they can interact with one another and be near to knowledge creation centers for their mutual benefit. This should allow the MTP to offer more competitive costs for businesses to locate there. The MTP will seek to attract clean, high-technology, knowledge-intensive industries, thereby generating new income and business opportunities.

The feasibility study will provide the SDT/DF with elements for the design, organization, and implementation of the project. The implementation of this project will have a multiplier effect and

lead to other quality investment opportunities and will transform the DF into one of Brazil's principal technological centers, promoting technology transfer, encouraging development of the knowledge economy, and attracting global companies.

A. ELEMENTS OF THE FEASIBILITY STUDY

It is essential that the planning of the MTP be based on studies that analyze the MTP's creation, public and private sector participation, the model of technology park to be adopted, the influence of the project on a range of economic activities, and the cost of implementing the project. The feasibility study should envisage the relation and participation of the state and a private sector party for implementation of the project.

The consultant may wish to partner with a city in the US that has a successful Technology Park to gain and learn from their experience. They may want to look at US cities that have focussed on a particular area of technology they want to focus on and then find a US city interested in twining with them and that would welcome the international connection. One suggestion would be Ann Arbor, Michigan. They have an excellent university and are in the process of setting up a biotech park and technology center.

The study will seek to conciliate the public interest in implementing the MTP with the participation of private enterprise.

SDT/GDF expects the feasibility study to answer the following questions:

- What actions are necessary on the part of the government to implement the MTP?
- What is the best model of technology park for this project?
- What are the strengths, weaknesses, opportunities and threats for carrying out the project (SWOT analysis)?
- What are general requirements for the MTP?
- What are the possible competitors?
- What should be the scope, objectives and opportunities of the Project?
- What is the relevant legislation governing technology parks?
- What would be the socio-economic impact of the project
- What is the necessary infrastructure for establishing the MTP?
- What are the potential flows of goods and services from firms locating in the MTP, and the potential markets for such goods and services?
- What are the supply and demand for goods and services to be produced in the MTP?
- What economic-financial model, including a Public Private Partnership (PPP) under the Federal Law 11.079/2004, would be most appropriate for building and operating the MTP?
- What different players should be involved, e.g. citizens, firms, government agencies?
- How should strategic planning of the MTP be conducted, and the branches of economic activity to be developed in the MTP be chosen?
- What are the possible means to finance the MTP, and what kind of assistance would be available for this purpose?

- What advantages can the MTP offer as an instrument of public policy to promote the development of the Federal District?
- Clear demonstration of the advantages of establishing the PTM?
- What is the magnitude of the investment necessary to make the PTM feasible?
- What are the estimated operational and maintenance costs of the undertaking?
- How should the overall strategic vision of the project be framed?
- What is the best site for the MTP?

Given the priority of the project, the study should be completed within four months from the date on which it is begun.

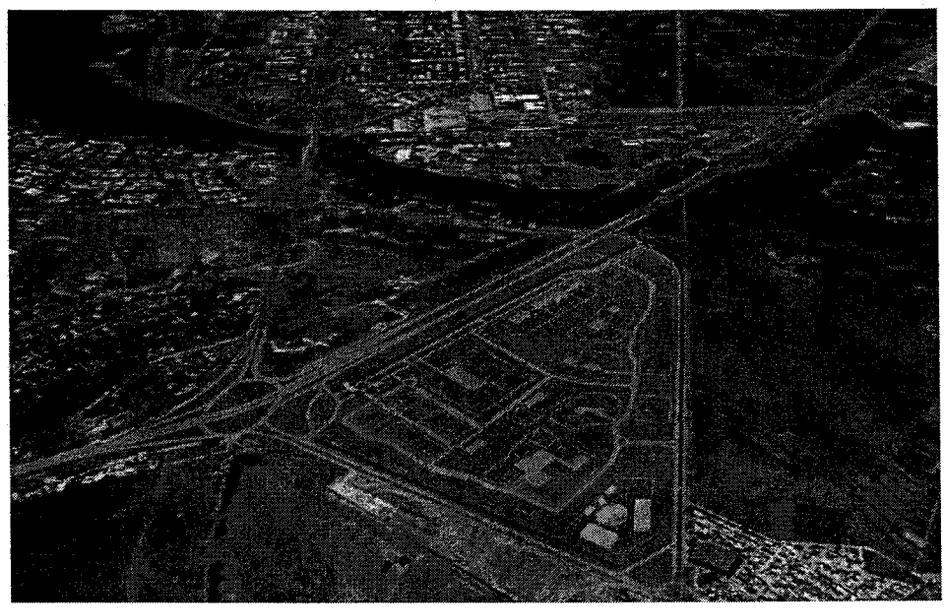
IV. REQUEST FOR USTDA ASSISTANCE

The feasibility study should meet world-class standards so that international firms with experience in the organization, construction, and management of technology parks will be attracted to compete when the bidding documents for the project itself are prepared. Since firms based in the United States have broad international experience in these matters, SDT/GDF has approached USTDA for technical assistance in carrying out the feasibility study.

V. VIABILITY OF THE PROJECT

H&A ascertained that the proposed project fits well within the GDF's economic and social development strategy for taking advantage of it's high level of educational development and the presence of a major research university, the University of Brasília, in the Federal District to move into high technology areas. Excellent educational and health services, high living standards, and cosmopolitan atmosphere due to the presence of embassies and international organizations can help attract highly mobile scientific and technical personnel to the Federal District. A reformed, streamlined, more efficient public administration actively seeks to reduce the cost of doing business in the Federal District. Brasília ranks first among Brazilian states in the World Bank Group's evaluations of the cost of doing business, is a major node in Brazil's road transport system, and has the third busiest international airport in the country, and is developing a system of export processing zones, business incubators, and technology parks.

Figure 1: The Federal District's Digital Capital Technology Park



The GDF has already moved in this direction by launching the Digital Capital Technology Park (DCTP), now under construction on a 132 hectare site near the Granja do Torto summer residence of the President of Brazil (Figure 1). The DCTP is focused on information and communication technologies (ICT) and the GDF expects that the DCTP will generate 80,000 new Jobs in the ICT sector, 20,000 of them direct jobs in the DCTP itself. The DGF has set a target of R$1 billion and an increase in gross output of the ICT sectors from R$2.5 billion to reach R$5 billion in 2014.

DCTP development is being guided by a management group including representatives of the public and private sectors and academia. The goal is to attract four major companies of international stature as well as micro, small and medium-sized enterprises. Land will be made available under concessions from the GDF. The GDF provides operational, administrative, financial, and logistical support to the management group.

The MTP would be the Federal District's second technology park, provisionally seeking to attract Brazilian and international firms in such general purpose technologies as biotechnology and nanotechnology. The precise focus of the MTP would be one of the many issues to be examined in the feasibility study, which is seen as a critical step in the development of the MTP.

The GDF at this stage is seeking a very broad-gauge feasibility study by a world-class consulting firm to help define the most important parameters of the MTP. International consultants with expertise in technology park development are expected to examine a variety of different options for the MTPs development and management, reviewing the experience of leading technology parks around the world, including the United States, Europe, Singapore, Japan and China. GDF missions have already visited One North, Singapore's world-class biotechnology park, the Barcelona Nord Technology Park in Spain, and Technopark Zürich in Switzerland.

On one hand, the MTP is presently in the early stages of conceptualization, and therefore it is hard to say much about the details of its design. On the other, the GDF has shown itself to be eager to receive the best possible advice on a wide range of critical design and management issues, and has indicated that it would be prepared to outsource the construction, management, and operation of the

MTP to a specialized international firm, and this offers important opportunities for US companies in this area.

In North America, the average operating budget for a technology park is about $1 million, some 20% of all parks have a budget of between $1-3 million, while 16% have a budget of $3-10 million, and 7% have a budget of more than $10 million. Park operations tend to make up close to 100% of the budgets of all the parks.

VI. CRITICAL SUCCESS FACTORS FOR PROJECT IMPLEMENTATION

Following the DM discussions with the H&A prepared a list of critical success factors applicable to projects, assuming the MTP project is to be implemented under either a PPP or a more conventional concession such as provided for in Federal Law 8666, and discussed them with SDET/DF.

Key External Determinants of Success of Technology Parks

- The government shares with the private sector benefits of the MTP's development
- Clear definition of contract objectives for the construction, operation and/or management of the MTP
- Support from top government managers and by the local economic development agencies
- Priority for payments to private sector partner for strategic and critical activities outsourced
- Establishment and application of penalties for non compliance with contract conditions
- The partnership between public and private sides becomes a conventional client and supplier relationship
- Other critical success factors inherent in outsourcing major strategic projects
- Clear direction of leadership and partnership with the University of Brasília (UNB) and possibly other universities and research institutions located in the Federal District
- Access to capital to construct buildings
- Access to equity to assist early-stage companies and start-ups in the incubator section
- Good match between the core competency of the university and the cluster strategy of recruitment of tenants
- Priority access to university resources, facilities, faculty, and students
- Attention to metrics and success stories

Key Internal Determinant of Success

- Availability of multi-tenant space for incubator graduates
- Availability of a formal business incubator
- Physical proximity to the UNB campus
- Presence of research anchor, government anchor, and/or corporate anchor tenants
- Full time staff
- Ability to manage inventory of lots and hold vacant space for expansion
- In-house capacity for partnership development
- Availability of common services (accounting, laboratories, Meeting rooms, fitness facilities, hotels, transportation, recreation, and retail stores.

According to Infodev's Incubator Support Center, Tech parks, and incubators especially need to establish a program for guiding companies in the area of technology by making available laboratories properly equipped with software and tools for developing new technologies, as well as guidance for registering the latter – intellectual property. Some Key Issues they need to look at are?

- Availability of specific types of laboratories?
  - What types of needs do each of the companies have based on their products and the processes to be developed,
  - How will these laboratories be set up?
  - What technical personnel will be available to monitor the development?.
- Availability of software and tools:
  - What types of software and tools will be needed?
  - What technical personnel will be available to monitor the development.?
- Assistance with intellectual property issues:
  - Availability of professionals capable of providing guidance on IP issues and on the registration process.

To determine what services will be offered by the incubator, you must first define at which stage of the enterprises will the incubator offer support. According to Infodev, the process of creating and developing businesses has four distinct stages:

- Conception: the entrepreneur identifies a market niche / need on the part of a specific target public and decides to open a company. The focus of this stage is development of a consistent business plan.
- Emerging Company: based on the agreed Business Plan, entrepreneurs begin developing the product and/or service to be offered. The objective at this stage is to have at least one prototype of the product to be offered. The legal formalization of the company may also occur in this stage.
- Consolidation: Next identify any consolidation in the market in which it has opted to function, with growth in the number of clients.
- Growth: as of the company's consolidation, the business will seek out new markets and expand its field of activity

VII. PROJECT RISKS

The following risks have been identified by SDET/DF and H&A:

- The MTP project was conceived only recently and all project parameters are unknown at this time
- The private sector partner(s) could face financial and operational difficulties
- Other risks inherent in outsourcing contracts

VIII. DEVELOPMENTAL IMPACT

Two somewhat differing developmental impacts of the project can be distinguished:

1. a *shorter-term impact* stemming from the results of the study itself that should result in the design and construction of the MTP; and
2. a *longer-term impact* as a result of MTP succeeding in attracting investments by private sector firms locating in the MTP .

Both of these impacts are described more fully below.

Primary Developmental Benefits

Particular primary developmental benefits can be enumerated as follows:

- **Infrastructure:** In the short term, although it will be the responsibility of the private sector partners to put in place the basic infrastructure (e.g. communications systems elements such as fiber, servers, routers, storage capacity, support personnel; common service buildings, equipment and staff; business incubator structures, roads). SDET/DF and more broadly the GDF will have to provide overall guidance in the design of the MTP, arrange for appropriate fiscal incentives, possibly establish an export processing zone and take other actions to support the MTP's development. The feasibility study and the outsourcing of final design, construction, and management of the center will facilitate the process, on a general level by transfer of knowledge and experience, and more specifically, by providing guidance on the design of the MTP and its mode of operation. In the longer term, to the extent that the MTP attracts high-tech companies that make successful investments, the benefits should extend well beyond these companies and their employees to the citizens, enterprises, the government of the Federal District (through increased tax revenues), and could be quite significant. Much of this infrastructure, moreover, could be supplied by US-based sources. (See also Section VI.)

- **Human Capacity Building:** The proposed Terms of Reference for the feasibility study include a task (Task 6) that involves reviewing the organizational preparedness of the SDET/DF to guide the development of the MTP. A particular focus of this task is the attendant human-resource requirements (number of personnel, skill sets, etc.), together with the corresponding capacity-building activities. Indirectly and longer term, successful implementation of the MTP provide important R&D opportunities for the UNB and other DF research institutions, offer high-quality employment for Federal District residents, and stimulate a productive relationship between the academic/research community and the private sector, providing internship opportunities for university students and employment for university and secondary school graduates.

- **Technology Transfer:** In terms of technology transfer, the principal immediate impact will be to familiarize the DGF with best practices in technology park design, construction and management – in the longer term it would be expected that international and Brazilian firms locating the technology park would both transfer existing technologies and create new ones

- **Market Oriented Reforms:** The projects would contribute directly to market-oriented reforms of public administration in the Federal District and Brazil by establishing a vibrant public-private-academic/research partnership and encouraging the development of private sector firms of all sizes.

IX. PROJECT SPONSOR'S COMMITMENT

The MTP project is part of one of the strategic projects of the Federal District: technology parks. Other complementary strategic projects include business incubators and export processing zones (one of each could be included in the MTP), an air cargo hub, a beltway (*anel viário*), and a multimodal logistics center. While the MTP is not yet well structured, it is precisely this issue, how to structure the MTP that the GDF seeks assistance from USTDA. The creation of more technology parks, especially with innovation or incubators, is one of the main recommendation contained in the recent World Bank report on Brazil and the Knowledge Economy and is a priority of all the BNDES, FINEP, ABDI, and is listed in the industrial policy of Brazil, PITCE (*Política Industrial, Tecnológica e de Comércio Exterior*), and the Science and Educational Policy, The goal of the PITCE was to:

- Foster innovation in industry;
- Improve innovative capacity in services, products and processes;
- Enhance the country's technological base in areas that show potential for growth;
- Create a favorable environment for private and public investments;
- Improve the image of Brazil abroad;
- Encourage development of projects guided towards mass consumption;
- Foster employment and income generation;
- Promote a regional development policy;
- Coordinate actions with national institutions, states, metropolitan regions and local governments to achieve policy coherence

X. IMPLEMENTATION FINANCING

The Federal District's contribution will be the provision of a site for the MTP using public lands, support for planning and implementation by SEDT and other GDF agencies, and possibly through the provision of fiscal incentives. The feasibility study would provide options for the construction, operation and management of the MTP, with a view to making it as self-sustaining as possible, minimizing the need for investment of public resources by enlisting private sector firms to undertake most if not all of the required investments to mobilize the current revenues needed to operate the center.

Preliminary estimates are that it will cost at least R$50 million for the first phase of construction and probably another R$30 million for a follow up phase.

As for financing of the private partner, the International Finance Corporation (IFC), part of the World Bank Goup, is a potential source of funding if the private partner seeks such funding. The private sector arm of the Inter-American Development Bank, the Inter-American Investment Corporation, is also a possible funding source.

The Brazilian government has a comprehensive offer of credit for the IT industry, public-sector lines of credit via the Financer of Studies and Projects (*Financiadora de Estudos e Projetos* - FINEP) and The National Economic and Social Development Bank (*Banco Nacinal de Desenvolvimento Econômico e Social* - BNDES). BNDES was originally designed for financing plants, physical capital (machinery, buildings), and along the years have developed procedures and a strong culture in the matter. However, R&D, innovation, services offer for industrial companies, branding etc. was not in its focus, which is why a new agency (FINEP) was created in the 1970s to

finance technological projects.[7] FINEP is a government-owned agency under the Ministry of Science and Technology that seeks to promote technological development and innovation in Brazil. Its role is to foster support to companies and institutions investing in new products and processes.

In May 2000 FINEP launched the INOVAR Project whose aim is to promote the development of small and medium-size businesses based on technology by designing instruments for their financing, especially venture capital. The INOVAR Project includes: INOVAR Fund Incubator; Brazil Innovation Forum; Brazil Venture Capital website; INOVAR Business Prospecting and Development Network; and Development of capacity building and training programs for venture capital agents.

Until 2005 it was forbidden for private companies to argue for additional resources for science and technology projects; the only possibility was a joint project with a public research institution – FINEP could finance the public partner; the company could then finance its own part by itself. The situation changed due to two new laws that permit public administration to finance science and technology projects in companies, and made easier and simpler for public institutes to make contracts of intellectual property rights with companies in joint projects. FINEP now offers non-reimbursable financing (for non-profit research institutions); Zero Interest (for projects under the new Industrial Policy, with less red tape and focus on small companies); Pro-innovation (for projects under the new Industrial Policy - financing for R&D, innovation and technological training projects).

The Inter-American Development Bank (IDB) was created in 1959 for the purpose of accelerating the economic and social development of Latin America and the Caribbean and today has 46 members. Other than the Bank, the Inter-American Development Group also includes the Inter-American Investment Corporation (IIC) and the Multilateral Investment Fund (MIF). MIF – Multilateral Investment Fund was created in 1993 to further the role of the private sector in Latin America and the Caribbean. Initially worth US$ 1.3 billion, MIF was given full and flexible power to rapidly meet the demands of the private sector with focus on development. MIF uses both non-reimbursable financing and other investment mechanisms to support small or specific research projects in other directions which act as catalysts for further change. MIF today is the largest source of non-reimbursable technical and financial assistance for developing the private sector in Latin America and the Caribbean.

A. OTHER POTENTIAL PARTNERS OR CONTRIBUTORS TO THE FINANCING OF THE PARK

According to FINEP's website[8], it has a large number of partners that help it fund the projects it is interested in. The partners are listed below:

SEBRAE - *Serviço Brasileiro de Apoio às Micro e Pequenas Empresas* (Brazilian support service for small and very small companies) is a technical institution supporting the development of small businesses, focusing on fostering and disseminating programs and projects that aim to promote and fortify very small and small businesses. Its purpose is to adopt a strategic, innovative and pragmatic approach to work in order to give the small business world in Brazil the best possible conditions for sustainable development, contributing towards the development of the country.

PETROS - *Fundação Petrobras de Seguridade Social* is the pension fund of the Brazilian

[7] Mario Sergio Salerno & Glauco Arbix, The Lisbon Strategy In A Knowledge Society Without Borders: The Brazilian View, January 2007, Paper prepared for the IEEI (Instituto de Estudos Estratégicos e Internacionais

[8] FINEP- http://www.venturecapital.gov.br/VCN_ING/en_parceiros_PI.asp

multinational company Petrobrás and is in the forefront of the private pension market. It offers products and services focusing on security, adapted to the expectations of its participants and sponsors. PETROS now serves some 18 companies in the Petrobrás group sponsors – and their employees – the participants.

ANPROTEC - *Associação Nacional de Entidades Promotoras de Empreendimentos de Tecnologias Avançadas* (Brazilian Association of Agencies Promoting Advanced Technological Projects) is the body representing the agencies that develop programs for technological incubators, parks and complexes in Brazil. The ANPROTEC mission is to combine, represent and defend the interests of the managing bodies of technological centers/complexes, parks and incubators, promoting these models as instruments for the country's development, striving to constantly create and fortify technology-based businesses.

SOFTEX - The corporate mission of *Sociedade para a Promoção da Excelência do Software Brasileiro* - SOFTEX (Society for Promoting the Excellence of Brazilian Software) is to undertake, promote, foster and support innovative work and scientific and technological development of Brazilian software and its applications, through management, technology transfer and promoting human capital with a view to Brazilian social-economic development. The work of SOFTEX and its agents is oriented to promote competitiveness in the software industry, Internet and electronic mail in Brazil and the availability of skilled human resources both in technologies and business in these areas.

CNPQ - *Conselho Nacional de Desenvolvimento Científico e Tecnológico*, (National Council for Scientific and Technological Development) reports to the Ministry of Science and Technology. The CNPq mission is to promote and foster Brazilian scientific and technological development in formulating the national polices of science & technology.

CNI/IEL-The latest institution of the National Confederation for Industry System (CNI), Euvaldo Lodi Institute (IEL) was created in 1969, inspired on the innovative thinking disseminated in advanced countries that the university-industry partnership is fundamental for sustaining the development of the productive sector. Its primary purpose is to promote interaction of the companies in the industrial sector with teaching and research institutions and other organizations based on know-how, with a view to the competitiveness and business and technological development of the productive sector.

B. OTHER PARTNERS

ABCR - *Associação Brasileira de Capital de Risco*, (the Brazilian Venture Capital Association), was founded on 26 June 2000 by 26 founder members to further the venture risk industry in Brazil, to benefit the investors, entrepreneurs, venture capital investors and the economy as a whole.

GAZETA MERCANTIL - is the biggest Brazilian communication and journalism company dedicated to reporting on events affecting on the business world. The Gazeta specializes in economic, business, scientific, and political coverage and covers the whole of Brazil, with special branches in the most important Brazilian states. The Gazeta owns the traditional printed newspaper but also has the investnews.net site that produces news and offers various search and research services on a wide range of market sectors.

ENDEAVOR - is an international non-profit organization that resources of private enterprise to support entrepreneurs in their search for capital, specialized technical know-how and development of their business.

NEW VENTURES - A project coordinated by the World Resources Institute (WRI) – which provides support for the creation of new projects by speeding up the venture capital transfer, permitting further investment opportunities that include social and environmental benefits.

RATIONAL SOFTWARE - Helps companies to develop and install software for e-business, e-infrastructure and e-devices by combining the best practices, software engineering service tools and engineering. Rational presents a single integrated e-development solution that simplifies the process of acquiring, implementing and supporting a comprehensive software development platform, cutting the total ownership cost.

SOMA - *Sociedade Operadora do Mercado de Ativos S/A* is the company responsible for administrating the organized over-the-counter market in Brazil. Its purpose is to offer an electronic environment for negotiating securities and other financial assets to the market.
SOMA is the marketplace where investors can obtain liquidity for their business and choose investment alternatives between technology-based companies another securities with high profit potential.

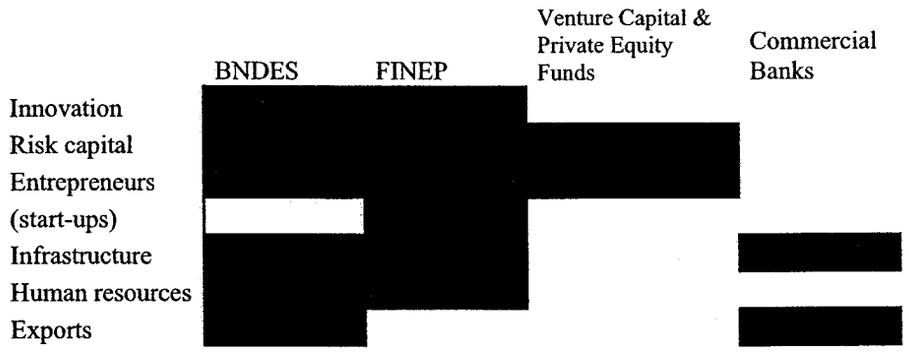
ABRAPP - 1st International Private Equity and Project Finance Seminar in Latin America – Investor Opportunities provides opportunities for discussions, presenting investment models and getting to know business opportunities. An ABRAPP achievement – Brazilian Association of Closed Complementary Pension Schemes.

BOVESPA -The São Paulo stock exchange (BOVESPA) founded on 23 August 1890, has a long history of services rendered to the capital market and Brazilian economy. It was the first Brazilian stock exchange to install the automated floor, with online real-time dissemination of information (in 1972), and became the largest share negotiation center in Latin America. This prestige culminated in a historic agreement to integrate all Brazilian stock exchanges in a single stock market – that of BOVESPA, which recently merged with the Commodites and Futures Market (BM&F). The two bodies are working in partnership with FINEP to encourage strengthing of Brazil's capital market as a source of financing to emerging companies, undertaking activities such as holding business rounds between companies and investors and creating support instruments for emerging companies in their process of capitalization and opening of capital.

In 2006, BNDES launched program to finance innovation in companies as well as special lines for bio-fuel development among others priority programs identified ion the Ministry of Trade and Economic Development's Industrial, Technological and Foreign Trade Policy (PITCE) guidelines. It now is possible to access public sources of financing through direct operations with BNDES favoring small scale companies; access to resources for innovation is simple and quick and a more market-oriented vision is encouraged for developing leading edge technologies and methodologies. BNDES, however, is still a traditional bank looking at physical assets as guaranties and results. It takes some time for changing focus.

The Brazilian government thus has put in place a comprehensive system offering credit for financing innovation via FINEP and BNDES. BNDES offers wide coverage, and there are extensive public-sector sources of finance for the IT sector and for larger scale companies with greater services content (e.g., *Prosoft Empresas* for software companies).

Characteristics of The Main Financing Modalities in Brazil



Sources: Interviews and websites of BNDES, FINEP and BB. Website capitalderisco.gov.br; A.T. Kearney analysis

Developing a technology park normally requires millions of dollars in investments over several years. One estimate that was given to us by Mauricio Guedes, Executive Director of the Rio Technology Park associated with the Federal University of Rio de Janeiro and President of the Association of Brazilian technology parks (Anprotec), was R$50 million for only the first phase of construction and much more for the future phases.

The common approach to private sector financing and constructing buildings in technology parks is to build on a per-project or per-building basis, depending on what the private sector sponsor is interested in. In North America, only 15% of the parks have used a private-sector master developer to develop the entire park acreage. An even smaller number, 5% are managed and financed by private, for-profit developers. 11% of all parks do their own development.[9] The Technology Park in Rio de Janeiro, although housed at Federal University of Rio de Janeiro, was privately sponsored by a variety of different private sector donors, of which Petrobrás, one of Brazil's more successful multinational companies, was the most important. There was no one Master developer for this park.

XI. US EXPORT POTENTIAL

A. Estimation of Export Potential

To estimate the potential for US exports that could eventually be created by the MTP project, it is necessary to resort to certain assumptions, namely:

- The feasibility study results in the successful implementation of the MTP).
- The MTP will require substantial new investments in roads, parking areas, buildings housing common services for Park tenants (especially small and medium firms), information infrastructure (e.g. in fiber, routers, servers, storage media); and laboratory, scientific and other equipment used in research as well as in software and consulting services. The magnitude of the investment required will have to be estimated during the feasibility study.

[9] Characteristics and Trends in North American Research Parks: 21st Century Directions, Battelle Technology Partnership Practice in association with the Association of University Research Parks, Battelle Memorial Institute, 2007

- The amount of physical ICT infrastructure to be deployed, including Internet, logic network, servers and software libraries for shared use. The physical infrastructure is a crucial factor for the support provided by the incubator that underpins the development of ICT enterprises. The MTP and the incubator need to provide the entire infrastructure required by the new enterprise.

There are further uncertainties associated with the estimation of the resultant export potential, most notably, the cost of the MTP construction and initial investments by firms locating there over the first years of the project which might be on the order of US$1 billion, as estimated by the sponsors of the DCTP for that park

Because the costs are so situation-specific, it is extremely difficult, if not impossible, to make more than order-of-magnitude estimates about the aggregate value of imported materials, equipment, and software for construction of the MTP's infrastructure, common facilities, and initial tenants' buildings and equipment. Still, it seems reasonable to assume that the investment in scientific equipment, telecommunications facilities, hardware and software should not be less than US$200 million, of which at least half, US$100 million, would be procured from US suppliers.. Thus we estimate the total market for US suppliers for the projects at no less than US$100 million, probably considerably more.

Moreover, a number of US ICT firms, such as Certisign, Cisco, Dell, HP, IBM, Oracle, Sun Microsystems, and many others have been supplying services, software, integration, and equipment to the Federal District for the existing GDF facilities. Should this project go forward, these companies, as well as others, would stand to benefit.

Potential US Suppliers

The range of state-of-the-art technologies that may be engaged in technology park development is quite large, and will depend on the kinds of research that the future tenants plan to conduct there. At a minimum, it includes the following:

- Optical fiber cable
- Servers
- Storage media
- Chips
- Desktop PCs
- Storage area networks (SAN)
- Server switches, routers, HBA
- Software, particularly security (anti virus/spam/hackers), database, server. e-mail, and datacenter management software
- Backup power generators
- Air conditioning equipment
- Scientific software
- Scientific and lab equipment for biotechnology, nanotechnology and other high-tech industries, such as bio-hoods, rotary shakers, Orbital Incubator Shakers, Laboratory Incubators, Ovens, Sterilizers, Seed Germinators, Deep Freezers, Incubator Shakers, Deionizer, Distillation Plants, Laminar Flows, Fume Hoods, Rotary Shakers

Identification of specific US suppliers is complicated because a considerable number of companies supply the technology park market. For example in servers, IBM, HP, Dell, Sun, Silicon Graphics,

Cubix, Aspen Systems, and Dell come to mind, but there are many more specialized producers. For Laboratory and Scientific equipment, the following 11 companies come to mind: Agilient Technologie; Millipore; Becton Dickinson; Amersham, Part of GE Healthcare; Thermo Electron, Thermo Fisher Scientific; BioRad; Invitrogen; Molecular Research Center, Inc; Cyto Pulse; PRO Scientific; LifeSpan, etc

Many if not most of these suppliers are active multi-nationally and have networks partners for sales.

XII. FOREIGN COMPETITION

US companies are clearly dominant in the market for ICT hardware, software, and services (including outsourcing) as well as in telecommunications equipment, but these firms face increasing competition from European and Asian suppliers and manufacturers. China and India are the big powerhouses for biotechnology equipment and suppliers, but there are also some strong European, and Canadian suppliers as well. A USTDA financed feasibility study for the GDF would help US suppliers get in at an early stage in the development of a new market for high technology equipment in the Federal District and potentially other states.

XIII. IMPACT ON THE ENVIRONMENT

The proposed Federal District MTP project is unlikely to have any significant negative impact on the environment, and a license for operating the Digital Capital Technolgogy Park (DTCP) has already been issued by the federal environmental agency, IBAMA. Nevertheless, the proposed feasibility study will include an environmental impact assessment.

XIV. IMPACT ON US LABOR

Funding for the MTP project will result in the creation of US jobs as major software integrators, hardware, and scientific equipment items are purchased from US manufacturers, and if a US firm is chosen to manage and operate the MTP. This could be directly if a US firm or its Brazilian affiliate becomes the private sector partner (or member of a consortium), or indirectly if a Brazilian or even a European or Asian firm were to be the partner, since US suppliers are strong competitors in the market for high-technology equipment, software, and consulting services. If USTDA finances the initial feasibility study and the contractor works closely with the US firms that expressed interest in this project, the likelihood of an increase in US jobs is even greater.

Financing this feasibility study and the actual execution of the MTP project will not result in the transfer or displacement of US jobs to the Federal District or other states. The feasibility study is designed to facilitate communication and cooperation between the GDF and the private sector both within the Federal District and more broadly, in Brazil, as the definitional mission conducted for by H&A already has had this effect. Moreover, USTDA financing of this feasibility study could, however, be used to assist in the development of an export-processing zone and might have a negative impact, direct or indirect, on US jobs.

XV. QUALIFICATIONS OF THE CONSULTANT TEAM

General Qualifications of the Consultant Team

As is evident from the accompanying Terms of Reference (MTP TOR; see Annex I), the proposed TA is multidisciplinary in nature. Accordingly, the skill sets and expertise of the Consultant Team are expected to be diverse. The following general attributes on the part of the Consultant Team are

considered critical to the successful outcome of the Technical Assistance for a detailed feasibility study of the project:

Technology park specialists

- Experience in the design, construction, and management of technology parks and related facilities.

Specialist in Brazilian public budget finance project analysis

- Knowledgeable in Brazilian public budget finance, competitive bidding and public contracts

Specialist in project analysis

- Expertise in the economic and financial analysis of projects and feasibility studies involving high technology industries and technology parks

Economists

- Expertise in urban and regional planning
- Expertise in analyzing economic impact of high-technology industries

Team Composition and Experience

In terms of the composition and particular credentials of the Consultant Team, it is judged that the team should consist of the following:

- One (1) Team Leader with experience in design, construction and operation of technology parks
- One (1) International technology park specialist
- One (1) Brazilian technology park specialist
- One (1) International economist
- One (1) Environmental Specialist
- One (1) Brazilian economist
- One (1) Brazilian Government Budget analyst/local liaison
- One (1) Brazilian Project/Financial Analyst
- One (1) Procurement Specialist
- One (1) Project Coordinator

More specific descriptions follow.

Team Leader:

- At least fifteen (15) years' experience in the technology park design, construction, and management
- Both a US and an international perspective on the technology parks, with the international perspective preferably gained through on-the-ground project work
- Management, organizational and cross-cultural skills and perspective to structure, oversee and carry out the Feasibility Study effectively
- Ability to communicate findings effectively and to liaise appropriately within the SDET/DF framework and with other stakeholders, including other Federal District public sector entities, academic and research institutions, and potential private sector partners

International Technology Park Specialist

- At least ten (10) years' experience with technology parks, including hands-on experience with design, construction, and management of technology parks
- At least five (5) years' international experience with technology parks, preferably in significant emerging economies
- At least 5 years experience with high-technology business incubators

Brazilian Technology Park Specialist

- At least three (3) years' experience with the design, construction, and management of Brazilian technology parks, Experience in defining and monitoring service level agreements (SLAs) for ICTs
- At least five (5) years' international experience with technology parks, preferably in significant emerging economies
- At least three (3) years experience with high-technology business incubators

International Economist

- At least 10 years experience in urban and regional planning,
- At least 5 years of international experience in developing countries
- Expertise in analyzing economic impact of high-technology industries

Environmental Specialist

- Experience in social and in environmental assessments of projects in developing countries
- Experience with donor-funded environmental and social performance standards and their interpretation, specifically those of the IDB and the World Bank.
- Ability to assess and guide the Government in developing environmental and social action plans and assessments that comply with all local and federal laws as well as World Bank and IDB rules.
- Fluency in Portuguese would be an advantage

Brazilian economist

- At least 10 years experience in urban and regional planning,
- At least 5 years of international experience in developing countries
- Expertise in analyzing economic impact of high-technology industries

Project Coordinator

The responsibilities of the Project coordinator include, but are not limited to, the following:

- Basic support logistics for everyone on team and their support people to ensure a smooth running of the project, such as deliverable coordination (formatting, timeliness, and other coordination),
- Travel coordination,
- Arranging workshops and conferences in person and by telephone.
- Managing and editing of deliverables, thereby ensuring that the deliverables closely follow the scope of work outlined. This way there are no surprises.

- Reviewing, coordinating and distributing presentation materials, both the electronic and paper versions of presentations.
- Developing and creating a library of resource material so that all consultants have easy access to any resource material, 24 x7, maintaining the library
- Arranging housing and payments for project related expenses,
- Coordinating with Project Manager on Project Finance issues such as expense payments, consultant time
- Arranging logistics for conferences and workshops
- Ability to speak and write Portuguese and English

Brazilian Public Budget Analyst:

- Duly qualified/accredited Brazilian expert with extensive knowledge of Brazilian government budgetary processes, competitive bidding and public contracts
- Familiarity with Brazilian federal, state and municipal public IT enterprises in Brazil
- Ability to serve as local liaison, set up meetings (secretarial service available)

Brazilian Project Analyst

- Expertise in the economic and financial analysis of projects and feasibility studies involving technology parks
- High degree of fluency in English would be an advantage

Procurement Specialist

- At least five (5) years expertise in procurement processes, compiling and writing proposals and bidding documents (*editals)*
- Familiarity with IT, Telecom and Technology Parks
- Familiarity with the purchasing process
- Fluency in Portuguese would be an advantage

In practice, it is unlikely that the backgrounds of the team members will fit the above profiles exactly. However, the collective qualifications of the Consultant Team should correspond to those described. If a proposed Consultant Team offers a comparable skill set but with a different distribution, or a basic arrangement different from the four-member team plus Local and Brazilian staff described above, it must be clearly demonstrated how such a team can efficiently carry out the full scope of the Feasibility Study.

A. Suggested Evaluation Criteria

It is suggested that the selection of the Contractor for both of the studies be based on the following criteria:

CRITERION	Max. Points
Expertise and skills of proposed personnel	50
Proposed approach to the TA and to the individual tasks	30
Pertinent international experience and cross-cultural skills	20
Total:	100

XVI. JUSTIFICATION

As this report has documented, the GDF has made technology parks a strategic priority, and has already begun construction of one, focused on the ICT industries. The Federal District has basic scientific, technological and education base necessary for the development of other high-technology industries, and has moved aggressively to create a modern and efficient public administration. Many GDF officials have been drawn from the private sector and they are keenly aware of the need to create a positive environment for private sector business. They are open to creative partnerships with the private sector to attain strategic government objectives. The MFP would be an excellent demonstration of this approach to public policy and private sector partnerships. It is also accelerating its development of e-government.

Moreover, the involvement of a US-based Consultant Team in carrying out the proposed feasibility studies should work to the advantage of US-based suppliers of electronic and communications infrastructure for the MTP and scientific equipment for the common facilities and private sector enterprises locating there, as well as those involved in the design, construction and operation of technology parks. These suppliers are strong in the major technological areas but face growing competition from foreign suppliers. H&A believes that initiatives to develop the MTP present a significant export opportunity for US suppliers (see Section VI), and even more so if the GDF project generates an interest in similar projects in other Brazilian states and even the Federal Government.

Accordingly, H&A believes that funding of the feasibility study on behalf of the SDET/DF would represent a good use of USTDA resources.

XVII. TERMS OF REFERENCE

The proposed Terms of Reference for the proposed datacenters Feasibility Study are attached as Annex I.

XVIII. BUDGET

The suggested Budget for the proposed Technology Park Feasibility Study is attached as Annex II

XIX. RECOMMENDATIONS

H&A recommends that USTDA fund the Technology Park project under the conditions set forth in the TOR at a budget level of $506,825.

XX. CONTACTS

A complete list of persons and institutions contacted in the conduct of the DM is included in Annex III.

ANNEX I: TERMS OF REFERENCE FOR THE MTP PROJECT

TASK 1: PREPARATION AND BACKGROUND RESEARCH

The Contractor shall research the Brazil ICT, science, education, and research sectors. This would include background information on various IT, technology, science, and education programs.

TASK 2: INITIAL VISIT AND ASSESSMENT OF CURRENT SITUATION

The consultant team members shall travel to Brasilia to familiarize themselves with the current situation and to meet with the Project's Sponsor, GDF. The consultant should also visit the successful Tech parks highlighted in the World Bank and AT Kearney Reports in Rio de Janeiro, Sao Paulo, and Porto Alegre in Rio Grande do Sul and learn about their operations, management, experience, and the incubator programs.

The contractor should already be familiar with the Federal PPP legislation, Science/technology and industry policy initiatives of PITCE, FINEP, ABDI, as well as Governmental public budget finance and project analysis.

TASK 3: CONDUCT A NEEDS/REQUIREMENT ANALYSIS FOR THE MULTI-SECTOR TECHNOLOGY PARK

In this task, the contractor will create a needs analysis and requirement document that will be used in Task 4 to create the business model.

Deliverable: Needs and Requirement Assessment document

TASK 4: DEVELOP FUNCTIONAL SPECIFICATIONS, ARCHITECTURE, AND BUSINESS MODEL

The contractor will:

- Analyze the findings from Task 3 and develop specifications regarding the architecture and design of the MTP
- Develop more precision in the estimates of network designs, equipment needs and capacity, and resulting capital expenditure and operating costs need for the broadband infrastructure for the complex.
- Create detailed operational model of the Technology Park and resulting data network, the management and security of the network and Park, the services needed.
- Technological Definition
  - Analysis of the technological environment available and of related trends.
  - Define the transfer of knowledge for the implementation team.
  - Define essential technical conditions and options for the project,
  - Define Project Metrics, performance, and other benchmarks to be used
  - Define Technological Standards to be followed
- Provide a list of potential US Suppliers interested in participating in the network

The main task here is to find a way of sharing the fruits of technological change with all parties in an equitable way. The contractor will illustrate and describe how this goal will be accomplished; what type of framework agreement will be used to introduce new technologies and products in the future so that all parties can share in the introduction of new technologies; and lastly, what type of

pricing formula for will be used to cost out these new products and lower the cost old products and services that will provide the most comfort to each party.

The contractor will design and develop a business model that takes into consideration the rapid and continuing technological evolution and convergence in the communications sector and its impact on the costs, pricing, and development of services. This model will include some type of mechanism that make it possible to plan for technological change at least 10 years into the future, enabling the private sector partners to make the necessary investments without fearing being trapped into a situation of sunk costs, while assuring the government that, even though technological advances, paradigm shifts, etc cannot be accurately projected.

Deliverable: Design, Technology Definitions, Business Model & Framework Agreement

TASK 5: ECONOMIC AND FINANCIAL ANALYSIS OF THE MTP

The Contractor will:

- Prepare estimates for rates of return for the Park's initial investment costs, including the embedded data transmission, control and storage network and for common services buildings and conduct scenario analysis of trends, project risks and total cost.
- Quantify the estimate for the amount of counterpart funds needed to be supplied by the GDF
- Analyze the budgetary and financial impacts of the Project
- Estimate the amount of investments (including the import content) by potential tenants over the first five years of the MTP's operations
- Assess all aspects of project feasibility (technical, economic, financial, political, legal and organizational) and their interrelations
- Prepare economic scenarios, risk analysis, rate return analysis, analysis of total cost of operation for the first five years of MTP operations.
- Quantify the economic development benefits to the region

Deliverable: Report on economic and financial analysis and interrelationships

TASK 6: ORGANIZATIONAL ISSUES

To support the development of a professional human resource function designed to be an effective source of capacity building. As GDF is the sponsor of MTP project, the consultant in this task needs to help design the organizational structure and requirements that would meet the needs of the projects in overseeing a privately operated entity.

- Identify and prioritize corporate governance issues that are necessary and critical to support the Business Plan
- Define the qualifications of the staff needed to carry out the project.
- Define the respective roles & relationships of the staff to the University, Government, or Corporate anchor tenants
- Identify the necessary support resources needed for work plan implementation in Task 10, i.e., the development of the remaining tasks and phases
- Create a mechanism for GDF to make use of these available resources use these resources or personnel
- Define the corporate governance structure

- Establish metrics and benchmarks
- Review current human capital deployment
- Identify opportunities for improvement of corporate governance structure
    - Barriers to success, both external and Internal
    - Keys to Success
- Foster Knowledge Transfer and Capacity Building
    - Help prioritize training professional development needs and implement a regular training schedule
    - Help create communities of practice, by encouraging the sharing of knowledge and information with staff members doing the same type of job, or staff members on different technical committee, as well as staff that previously worked in their areas, to share information, failures, and successes.

Deliverable: Human Resources, Knowledge Transfer, and Capacity Building Plan

TASK 7: CONDUCT A PRELIMINARY ENVIRONMENTAL ASSESSMENT

- Conduct a preliminary review and evaluation of the expected environmental impacts and their compatibility with both local regulations and the requirements of potential lending agencies, especially the World Bank, the IFC, and the IDB.
- Discuss how any potentially significant negative impacts can be minimized.
- Identify Agency/Department expectations priorities, opportunities, and trends,
- Analyze the environmental impact on legislative and judicial branches of government and other levels of government (Federal and Municipal).
- Verify possible transfers of effects, identify and adopt preventive measures and actions to obtain synergies with other departments and Agencies involved
- Develop plans for full environmental impact assessment in anticipation of the Project moving forward to the implementation stage.

Deliverable: Preliminary Environmental assessment report

TASK 8: DEVELOPMENTAL IMPACT ANALYSIS

The Contractor should identify and assess the developmental outcomes that would be expected if the Project is implemented in accordance with the recommendations of the Study. The Contractor should focus on estimating the Project's potential benefits in any or all of four areas: additions to infrastructure or industrial capacity; nature and effects of any legal/regulatory changes resulting from the Project; expected human capacity building; technology transfer and its effects. The analysis of potential developmental benefits should be as concrete and detailed as possible and include at least one specific example of developmental impact for each area that is relevant for the Project. Any significant developmental impacts outside the four areas listed above should also be included.

Deliverable: A report setting forth the findings and opinions as specified above.

TASK 9: PROJECT PLANNING AND IMPLEMENTATION

The Contractor will assess and determine whether the critical success factors for project implementation have been met and the project risks identified have been accounted for and

mitigated to the extent possible. The contractor will also review the HR Capacity Building, Knowledge Transfer, and Training Plan proposed in Task 7 and incorporates these recommendations into the implementation plan. The contractor will also create options for property, management, and operation of the network.

The Critical success factors are the following:

- A successful change management process be conducted in the affected secretariats and government agencies
- Training of state personnel in the management of outsourcing, Service Level agreements for the data network, etc.
- Clear definition of contract objectives (scope, service levels, metrics, requirements, etc.)
- Support from top government managers
- Establishment and application of penalties for non compliance with contract conditions
- Definition of a clear process exiting from the contract and transition to another supplier
- The partnership between public and private sides becomes a conventional client and supplier relationship
- Other critical success factors inherent in outsourcing processes for IT

The Project Implementation Report will recommend the most appropriate structure for the project, summarize the steps that need to be undertaken by the government to implement the Project according to the recommended structure, and analyze any regulatory or other steps involved with the creation of any new legal entity that may be required.

TASK 10: PREPARATION OF TOR FOR A BIDDING DOCUMENT

The Contractor shall prepare one or more bidding documents (*Editals*) that cover all of the goods and services needed for Project implementation. The U.S. Firm shall prepare the *Edital(s)* in consultation with the Grantee. The Contractor also shall develop a timetable for publicizing the *Edital(s),* and for awarding the contract(s) for the goods and services covered by the *Edital(s).* Every *Edital* must be fully consistent with the legal requirements of Brazil.

Deliverable: Complete draft of the *Edital(s),* ready for publication. The U.S. Firm shall provide copies of the *Edital(s)* in both English and Portuguese.

TASK 11: PRESENTATION, APPROVAL FOR PUBLICATION, AND FINAL REPORT

Upon concluding the preparation and publishing of the project *edital*, the Contractor, while still in Brasilia will formally present to GDF the findings and recommendations and a near final version of the report. The Grantee will be able to use this opportunity to ask questions or provide further comments and suggestions based on the presentation and draft of the Final Report.

After the Presentation, the contractor will make the final changes suggested by the Grantee and submit the Final Report to both the Grantee and to USTDA. The Contractor shall ensure that the Final Report is a substantive and comprehensive report of all of the work performed in accordance with these Terms of Reference for Phase II, including all deliverables. The Final Report must be prepared in accordance with Clause I of Annex II of the Grant Agreement. The Contractor must identify prospective U.S. sources of supply in Final Report to be submitted to the Grantee and USTDA in accordance with Clause I of Annex II of the Grant Agreement.

The Final Report shall be a comprehensive document covering and synthesizing the findings of all the preceding tasks, GDF with the appropriate information, recommendations and guidelines. In the event that the Final Report contains confidential information, or information not yet made public, the Consultant Team shall take appropriate steps to ensure that sensitive information is not released inopportunely.

Deliverable: Draft Final Report and Presentation

Notes:

1) **The U.S. Firm is responsible for compliance with U.S. export licensing requirements, if applicable, in the performance of the Terms of Reference.**
2) **The U.S. Firm and the Grantee shall be careful to ensure that the public version of the Final Report contains no security or confidential information.**
3) **The Grantee and USTDA shall have an irrevocable, worldwide, royalty-free, non-exclusive right to use and distribute the Final Report and all work product that is developed under these Terms of Reference.**
4) **All deliverables shall be supplied in the English language. Additionally, the Final Report and presentation shall be translated into Portuguese. The U.S. Firm shall ensure the quality and accuracy of the translation.**

ADDITIONAL COMMENTS

Comment 1: Successful execution of the FS presupposes that 1) the Consultant Team establishes a close working relationship between the Consultant Team and the GDF 2), that the team is prepared to spend the necessary amount of time on-site in-country; and 3) the consultant team has appropriate access to government officials and personnel, resources and data. Successful performance of the FS is obviously dependent on full and timely availability of the resources in question. It is expected that candidate firms for carrying out the FS will address these issues in their proposals, both in general terms and in terms of specific requirements (e.g., for desk space, phone/fax, Internet connection).

Comment 2: Below are three possible local consultants who are experts in the industry and who might be interested in working with the US-based consultant team.

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ExPresident of ANPROTEC

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Former National Secretary for National Secretary for Industrial Technology in Ministry of Science and Technology and Nationla Secretary for IT in the Ministry of Science and Technology, and former President of the National Institute for Industrial Property (equivalent of US Patent Office).

Roberto Spolidoro
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robertospolidoro@uol.com.br

Effective dean of Brazilian science and technology park professionals. Active in the field for some 30 years.

ANNEX II: BUDGET FOR THE MTP PROJECT

ANNEX III - SECTION 18

Technical Assistance To Brasilia for the Multi-Sector Technology Park-Summary
Table 1
(Breakdown of labor costs by task in Table 2)

DIRECT LABOR (DL) (*)	NAME, TITLE & LABOR CATEGORY	DAILY (8HR) RATE	# PERSON DAYS	TOTAL
	Team Leader	$1,300	75	$97,500
	International Technology Park Specialist	$1,300	86	$111,800
	International Economist	$1,300	28	$36,400
	Environmental Specialist	$1,100	22	$24,200
	Brazilian Technology Park Specialist	$900	49	$44,100
	Brazilian Economist	$900	26	$23,400
	Brazilian Govt Budget Analyst	$750	18	$13,500
	Brazilian Project Analyst	$750	25	$18,750
	Procurement Specialist	$ 1,100	14	$15,400
Total			**343**	
OTHER DIRECT LABOR	Project Coordinator	$1,000	42	$42,000
TOTAL DIRECT LABOR				**$427,050**
OTHER DIRECT COSTS	(ODC)			
International Travel	US-Brasilia	1500	7	$10,500
	Brasilia-Rio	175	2	$350
	Rio-Sao Paulo	150	2	$300
	Sao Paolo-Porto Alegre	250	2	$500
	Porto Alegre-Basilia	300	2	$600
Ground Transportation	Brasilia	1000		$1,500
	Rio	150		$150
	Sao Paolo	150		$150
	Porto Alegre	150		$150
PER DIEM -$ Staff	Brasilia 150 days@271	271	150	$40,650
	Rio 3 days @348	348	3	$1,044
	Sao Paolo 3 days @251	251	3	$753
	Porto Alegre 3 days@201	201	3	$603
Local Brazilians	Rio 3 days @348	348	3	$1,044
	Sao Paolo 3 days @251	251	3	$753
	Porto Alegre 3 days@201	201	3	$603
OTHER				
Visas		125	5	$625
Communications				$750
Translation				$18,000
Supplies, Copy & Reproduction				$750
TOTAL OTHER DIRECT COSTS (ODC)				**$ 79,775**
TOTAL BUDGET				**$ 506,825**

Notes:
(*) Labor rates for each specialist and/or subcontractor contain no mark-up for holidays, vacation, or sick-leave.

Assumptions:3 round trips for Team Leader, 1 trip for the Tech Park specialist, 1 for the Economist, 1 for the environmental specialist, 1 for Procurement Specialist

Per diems are equal to total estimated in-country days of US Consultant Team. Per diem rate is based on the US Government rates
Rates shown are taken from the US State Department website: http://aoprals.state.gov/web920/per_diem_action.asp?MenuHide=1&CountryCode=1042

Cheap Fares to Brazil can be obtained through BACC Travel at 1800-222-2746 (www.bacctravel.com)

Technical Assistance To Brasilia for the Multi-Sector Technology Park

Table 2 -- Breakdown of Labor Costs per Task

(Total Costs in Table 1)

DIRECT LABOR (DL) (*)	NAME, TITLE & LABOR CATEGORY	DAILY (8HR) RATE	# PERSON DAYS	COST
Task 1				
Preparation & Background				
	Team Leader	$1,300	7	$9,100
	International Technology Park Specialist	$1,300	4	$5,200
	International Economist	$1,300	3	$3,900
	Environmental Specialist	$1,100	2	$2,200
	Brazilian Technology Park Specialist	$900	3	$2,700
	Brazilian Economist	$900	1	$900
	Brazilian Govt Budget Analyst	$750	1	$750
	Brazilian Project Analyst	$750	1	$750
	Project Coordinator	$1,000	4	$ 4,000
Subtotal Task 1			***26***	***$ 29,500***
Task 2				
Initial Visit & Assessment				
	Team Leader	$1,300	7	$9,100
	International Technology Park Specialist	$1,300	20	$26,000
	International Economist	$1,300	5	$6,500
	Environmental Specialist	$1,100	5	$5,500
	Brazilian Technology Park Specialist	$900	10	$9,000
	Brazilian Economist	$900	4	$3,600
	Brazilian Govt Budget Analyst	$750	2	$1,500
	Brazilian Project Analyst	$750	2	$1,500
	Project Coordinator	$1,000	4	$ 4,000
Subtotal Task 2			***59***	***$ 66,700***
Task 3				
Conduct A Needs/Requirement Analysis				
	Team Leader	$1,300	5	$6,500
	International Technology Park Specialist	$1,300	15	$19,500
	International Economist	$1,300	7	$9,100
	Environmental Specialist	$1,100	3	$3,300
	Brazilian Technology Park Specialist	$900	10	$9,000
	Brazilian Economist	$900	2	$1,800
	Brazilian Govt Budget Analyst	$750	2	$1,500
	Brazilian Project Analyst	$750	2	$1,500
	Project Coordinator	$1,000	3	$3,000
Subtotal Task 3			***49***	***$ 55,200***
Task 4				
Develop Specs, Architecture, Business Model Etc				
	Team Leader	$1,300	5	$6,500
	International Technology Park Specialist	$1,300	10	$13,000
	International Economist	$1,300	2	$2,600
	Environmental Specialist	$1,100		$0
	Brazilian Technology Park Specialist	$900	7	$6,300
	Brazilian Economist	$900	1	$900
	Brazilian Govt Budget Analyst	$750	1	$750
	Brazilian Project Analyst	$750	2	$1,500
	Project Coordinator	$1,000	3	$3,000
Subtotal Task 4			***31***	***$ 34,550***
Task 5				
Economic And Financial Analysis				
	Team Leader	$1,300	5	$6,500
	International Technology Park Specialist	$1,300	3	$3,900
	International Economist	$1,300	8	$10,400
	Environmental Specialist	$1,100		$0
	Brazilian Technology Park Specialist	$900	1	$900
	Brazilian Economist	$900	6	$5,400
	Brazilian Govt Budget Analyst	$750	5	$3,750
	Brazilian Project Analyst	$750	3	$2,250
	Project Coordinator	$1,000	3	$3,000
Subtotal Task 5			***34***	***$ 36,100***

Task 6				
Organization				
	Team Leader	$1,300	4	$5,200
	International Technology Park Specialist	$1,300	6	$7,800
	International Economist	$1,300	2	$2,600
	Environmental Specialist	$1,100	2	$2,200
	Brazilian Technology Park Specialist	$900	3	$2,700
	Brazilian Economist	$900	1	$900
	Brazilian Govt Budget Analyst	$750	1	$750
	Brazilian Project Analyst	$750	2	$1,500
	Project Coordinator	$1,000	4	$4,000
Subtotal Task 6			***25***	***$ 27,650***
Task 7				
Environmental Assessment				
	Team Leader	$1,300	2	$2,600
	International Technology Park Specialist	$1,300		$0
	International Economist	$1,300		$0
	Environmental Specialist	$1,100	6	$6,600
	Brazilian Technology Park Specialist	$900		$0
	Brazilian Economist	$900		$0
	Brazilian Govt Budget Analyst	$750		$0
	Brazilian Project Analyst	$750		$0
	Project Coordinator	$1,000	2	$2,000
Subtotal Task 7			***10***	***$ 11,200***
Task 8				
Developmental Impact Analysis				
	Team Leader	$1,300	5	$6,500
	International Technology Park Specialist	$1,300	4	$5,200
	International Economist	$1,300		$0
	Environmental Specialist	$1,100		$0
	Brazilian Technology Park Specialist	$900		$0
	Brazilian Economist	$900		$0
	Brazilian Govt Budget Analyst	$750	1	$750
	Brazilian Project Analyst	$750	3	$2,250
	Project Coordinator	$1,000	2	$2,000
Subtotal Task 8			***15***	***$ 16,700***
Task 9				
Project Planning And Implementation				
	Team Leader	$1,300	6	$7,800
	International Technology Park Specialist	$1,300	5	$6,500
	International Economist	$1,300	1	$1,300
	Environmental Specialist	$1,100	2	$2,200
	Brazilian Technology Park Specialist	$900	4	$3,600
	Brazilian Economist	$900		$0
	Brazilian Govt Budget Analyst	$750	1	$750
	Brazilian Project Analyst	$750	3	$2,250
	Project Coordinator	$1,000	3	$3,000
Subtotal Task 9			***25***	***$ 27,400***
Task 10				
Preparation of TOR For Edital	Team Leader	$1,300	10	$ 13,000
	International Technology Park Specialist	$1,300	10	$ 13,000
	Brazilian Technology Park Specialist	$900	6	$ 5,400
	Brazilian Govt Budget Analyst	$750	2	$ 1,500
	Brazilian Project Analyst	$750	4	$ 3,000
	Procurement Specialist	$1,100	5	$ 5,500
	Project Coordinator	$1,000	3	$ 3,000
Subtotal Task 10			***43***	***$ 44,400***
Task 11				
Preparation of Procurement Report	Team Leader	$1,300	4	$ 5,200
	International Technology Park Specialist	$1,300	1	$ 1,300
	Brazilian Technology Park Specialist	$900	1	$ 900
	Brazilian Govt Budget Analyst	$750	1	$ 750
	Brazilian Project Analyst	$750	1	$ 750
	Procurement Specialist	$1,100	5	$ 5,500
	Project Coordinator	$1,000	3	$ 3,000
Subtotal Task 11			***17***	***$ 19,200***

Task 12					
Present. & Final Report	Team Leader		$1,300	15	$ 19,500
	International Technology Park Specialist		$1,300	8	$ 10,400
	Environmental Specialist		$1,100	2	$2,200
	Brazilian Technology Park Specialist		$900	4	$ 3,600
	Brazilian Govt Budget Analyst		$750	1	$ 750
	Brazilian Project Analyst		$750	2	$ 1,500
	Procurement Specialist	$	1,100	4	$ 4,400
	Project Coordinator		$1,000	8	$ 8,000
Subtotal Task 12				***21***	***$ 48,150***
Total Direct Labor	Team Leader		$1,300	75	$ 97,500
	International Technology Park Specialist		$1,300	86	$ 111,800
	International Economist		$1,300	28	$ 36,400
	Environmental Specialist		$1,100	22	$ 24,200
	Brazilian Technology Park Specialist		$900	49	$ 44,100
	Brazilian Economist		$900	26	$ 23,400
	Brazilian Govt Budget Analyst		$750	18	$ 13,500
	Brazilian Project Analyst		$750	25	$ 18,750
	Procurement Specialist	$	1,100	14	$ 15,400
	Project Coordinator		$1,000	42	$ 42,000
				385	**$ 427,050**
TOTAL DIRECT LABOR					**$ 427,050**

ANNEX III: CONTACTS

Federal District

GOVERNMENT OF THE FEDERAL DISTRICT

Odilon Frazão
Subsecretário de Investimentos e Negócios Internacionais
Secretaria de Estado de Desenvolvimento Econômico e Turismo
Brasília - DF
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e-mail: odilonf@yahoo.com

CASA CIVIL, PRESIDENCY OF THE REPUBLIC

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Special Advisor
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Tel: +55 (61) 3411-1411
e-mail: abarbosa@planalto.gov.br

MINISTRY OF COMMUNICATIONS

Heliomar Medeiros de Lima
Director of Digital Inclusion
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e-mail: heliomar.lima@mc.gov.br

WORLD BANK, BRAZIL COUNTRY MANAGEMENT UNIT

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US EMBASSY-BRASILIA

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Daniele Andrews
US Commercial Service
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US CONSULATE-RIO DE JANEIRO

Camille Richardson
Principal Commercial Officer
US Commercial Service, Rio de Janeiro
US Consulate General
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Fax: 55-21-3823-2424
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Patrick H. Levy,
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Genard Homes Burity
Business Development Specialist
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RIO TECHNOLOGY PARK

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Alfredo Laufer
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ANNEX 3

U.S. TRADE AND DEVELOPMENT AGENCY
Arlington, VA 22209-2131

NATIONALITY, SOURCE, AND ORIGIN REQUIREMENTS

The purpose of USTDA's nationality, source, and origin requirements is to assure the maximum practicable participation of American contractors, technology, equipment and materials in the prefeasibility, feasibility, and implementation stages of a project.

USTDA STANDARD RULE (GRANT AGREEMENT STANDARD LANGUAGE):

Except as USTDA may otherwise agree, each of the following provisions shall apply to the delivery of goods and services funded by USTDA under this Grant Agreement: (a) for professional services, the Contractor must be either a U.S. firm or U.S. individual; (b) the Contractor may use U.S. subcontractors without limitation, but the use of subcontractors from host country may not exceed twenty percent (20%) of the USTDA Grant amount and may only be used for specific services from the Terms of Reference identified in the subcontract; (c) employees of U.S. Contractor or U.S. subcontractor firms responsible for professional services shall be U.S. citizens or non-U.S. citizens lawfully admitted for permanent residence in the U.S.; (d) goods purchased for implementation of the Technical Assistance and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and (e) goods and services incidental to support (e.g., local lodging, food, and transportation) in host country are not subject to the above restrictions. USTDA will make available further details concerning these standards of eligibility upon request.

NATIONALITY:

1) Rule

Except as USTDA may otherwise agree, the Contractor for USTDA funded activities must be either a U.S. firm or a U.S. individual. Prime contractors may utilize U.S.

subcontractors without limitation, but the use of host country subcontractors is limited to 20% of the USTDA grant amount.

2) Application

Accordingly, only a U.S. firm or U.S. individual may submit proposals on USTDA funded activities. Although those proposals may include subcontracting arrangements with host country firms or individuals for up to 20% of the USTDA grant amount, they may not include subcontracts with third country entities. U.S. firms submitting proposals must ensure that the professional services funded by the USTDA grant, to the extent not subcontracted to host country entities, are supplied by employees of the firm or employees of U.S. subcontractor firms who are U.S. individuals.

Interested U.S. firms and consultants who submit proposals must meet USTDA nationality requirements as of the due date for the submission of proposals and, if selected, must continue to meet such requirements throughout the duration of the USTDA-financed activity. These nationality provisions apply to whatever portion of the Terms of Reference is funded with the USTDA grant.

3) Definitions

A "U.S. individual" is (a) a U.S. citizen, or (b) a non-U.S. citizen lawfully admitted for permanent residence in the U.S. (a green card holder).

A "U.S. firm" is a privately owned firm which is incorporated in the U.S., with its principal place of business in the U.S., and which is either (a) more than 50% owned by U.S. individuals, or (b) has been incorporated in the U.S. for more than three (3) years prior to the issuance date of the request for proposals; has performed similar services in the U.S. for that three (3) year period; employs U.S. citizens in more than half of its permanent full-time positions in the U.S.; and has the existing capability in the U.S. to perform the work in question.

A partnership, organized in the U.S. with its principal place of business in the U.S., may also qualify as a "U.S. firm" as would a joint venture organized or incorporated in the United States consisting entirely of U.S. firms and/or U.S. individuals.

A nonprofit organization, such as an educational institution, foundation, or association may also qualify as a "U.S. firm" if it is incorporated in the United States and managed by a governing body, a majority of whose members are U.S. individuals.

SOURCE AND ORIGIN:

1) Rule

In addition to the nationality requirement stated above, any goods (e.g., equipment and materials) and services related to their shipment (e.g., international transportation and insurance) funded under the USTDA Grant Agreement must have their source and origin in the United States, unless USTDA otherwise agrees. However, necessary purchases of goods and project support services which are unavailable from a U.S. source (e.g., local food, housing and transportation) are eligible without specific USTDA approval.

2) Application

Accordingly, the prime contractor must be able to demonstrate that all goods and services purchased in the host country to carry out the Terms of Reference for a USTDA Grant Agreement that were not of U.S. source and origin were unavailable in the United States.

3) Definitions

"Source" means the country from which shipment is made.

"Origin" means the place of production, through manufacturing, assembly or otherwise.

Questions regarding these nationality, source and origin requirements may be addressed to the USTDA Office of General Counsel.

ANNEX 4

USTDA # Brazil 09-51004A

GRANT AGREEMENT

This Grant Agreement is entered into between the Government of the United States of America, acting through the U.S. Trade and Development Agency ("USTDA") and the Government of the Federal District of Brazil acting through the Secretariat for Economic Development and Tourism ("Grantee"). USTDA agrees to provide the Grantee under the terms of this Agreement US$507,000 ("USTDA Grant") to fund the cost of goods and services required for a feasibility study ("Study") on the proposed Multi-Sector Technology Park Project ("Project") in Brazil ("Host Country").

cc: NG and ITC NB NV

1. USTDA Funding

The funding to be provided under this Grant Agreement shall be used to fund the costs of an Agreement of Understanding to Perform the Feasibility Study ("Agreement of Understanding") between the Grantee and the U.S. firm selected by the Grantee ("U.S. Firm") under which the U.S. Firm will perform the Study. Payment to the U.S. Firm will be made directly by USTDA on behalf of the Grantee with the USTDA Grant funds provided under this Grant Agreement.

2. Terms of Reference

The Terms of Reference for the Study ("Terms of Reference") are attached as Annex I and are hereby made a part of this Grant Agreement. The Study will examine the technical, financial, environmental, and other critical aspects of the proposed Project. The Terms of Reference for the Study shall also be included in the Agreement of Understanding.

3. Standards of Conduct

USTDA and the Grantee recognize the existence of standards of conduct for public officials, and commercial entities, in their respective countries. The parties to this Grant Agreement and the U.S. Firm shall observe these standards, which include not accepting payment of money or anything of value, directly or indirectly, from any person for the purpose of illegally or improperly inducing anyone to take any action favorable to any party in connection with the Study.

4. Grantee Responsibilities

The Grantee shall undertake its best efforts to provide reasonable support for the U.S. Firm, such as local transportation, office space, and secretarial support.

5. USTDA as Financier

(A) USTDA Approval of Competitive Selection Procedures

Selection of the U.S. Firm shall be carried out by the Grantee according to its established procedures for the competitive selection of contractors with advance notice of the procurement published online through *Federal Business Opportunities (www.fedbizopps.gov).* Upon request, the Grantee will submit these contracting procedures and related documents to USTDA for information and/or approval.

(B) USTDA Approval of U.S. Firm Selection

The Grantee shall notify USTDA at the address of record set forth in Article 17 below upon selection of the U.S. Firm to perform the Study. Upon approval of this selection by USTDA, the Grantee and the U.S. Firm shall then enter into an Agreement of Understanding. The Grantee shall notify in writing the U.S. firms that submitted unsuccessful proposals to perform the Study that they were not selected.

(C) USTDA Approval of Agreement of Understanding Between Grantee and U.S. Firm

The Grantee and the U.S. Firm shall enter into an Agreement of Understanding. This Agreement of Understanding, and any amendments thereto, including assignments and changes in the Terms of Reference, must be approved by USTDA in writing. To expedite this approval, the Grantee (or the U.S. Firm on the Grantee's behalf) shall transmit to USTDA, at the address set forth in Article 17 below, a photocopy of an English language version of the signed Agreement of Understanding or a final negotiated draft version of the Agreement of Understanding.

(D) USTDA Not a Party to the Agreement of Understanding

It is understood by the parties that USTDA has reserved certain rights such as, but not limited to, the right to approve the terms of the Agreement of Understanding and any amendments thereto, including assignments, the selection of all U.S. Firms, the Terms of Reference, the Final Report, and any and all documents related to any Agreement of Understanding funded under the Grant Agreement. The parties hereto further understand and agree that USTDA, in reserving any or all of the foregoing approval rights, has acted solely as a financing entity to assure the proper use of United States Government funds, and that any decision by USTDA to exercise or refrain from exercising these approval rights shall be made as a financier in the course of funding the Study and shall not be construed as making USTDA a party to the Agreement of Understanding. The parties hereto understand and agree that USTDA may, from time to time, exercise the foregoing approval rights, or discuss matters related to these rights and the Project with the parties to the Agreement of Understanding or any sub-agreement, jointly or separately, without thereby incurring any responsibility or liability to such parties. Any approval or failure to approve by USTDA shall not bar

the Grantee or USTDA from asserting any right they might have against the U.S. Firm, or relieve the U.S. Firm of any liability which the U.S. Firm might otherwise have to the Grantee or USTDA.

(E) Grant Agreement Controlling

Regardless of USTDA approval, the rights and obligations of any party to the Agreement of Understanding or any sub-agreement thereunder must be consistent with this Grant Agreement. In the event of any inconsistency between the Grant Agreement and any Agreement of Understanding or sub-agreement funded by the Grant Agreement, the Grant Agreement shall be controlling.

6. Disbursement Procedures

(A) USTDA Approval of Agreement of Understanding Required

USTDA will make disbursements of Grant funds directly to the U.S. Firm only after USTDA approves the Grantee's Agreement of Understanding with the U.S. Firm.

(B) U.S. Firm Invoice Requirements

The Grantee should request disbursement of funds by USTDA to the U.S. Firm for performance of the Study by submitting invoices in accordance with the procedures set forth in the USTDA Mandatory Clauses in Annex II.

7. Effective Date

The effective date of this Grant Agreement ("Effective Date") shall be the date of signature by both parties or, if the parties sign on different dates, the date of the last signature.

8. Study Schedule

(A) Study Completion Date

The completion date for the Study, which is December 31, 2009, is the date by which the parties estimate that the Study will have been completed.

(B) Time Limitation on Disbursement of USTDA Grant Funds

Except as USTDA may otherwise agree, (a) no USTDA funds may be disbursed under this Grant Agreement for goods and services which are provided prior to the Effective Date of the Grant Agreement; and (b) all funds made available under the Grant Agreement must be disbursed within four (4) years from the Effective Date of the Grant Agreement.

9. USTDA Mandatory Clauses

All Agreements of Understanding funded under this Grant Agreement shall include the USTDA mandatory clauses set forth in Annex II to this Grant Agreement. All sub-agreements funded or partially funded with USTDA Grant funds shall include the USTDA mandatory clauses, except for clauses B(1), G, H, I, and J.

10. Use of U.S. Carriers

(A) Air

Transportation by air of persons or property funded under the Grant Agreement shall be on U.S. flag carriers in accordance with the Fly America Act, 49 U.S.C. 40118, to the extent service by such carriers is available, as provided under applicable U.S. Government regulations.

(B) Marine

Transportation by sea of property funded under the Grant Agreement shall be on U.S. carriers in accordance with U.S. cargo preference law.

11. Nationality, Source and Origin

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and services funded by USTDA under the Grant Agreement: (a) for professional services, the U.S. Firm must be either a U.S. firm or U.S. individual; (b) the U.S. Firm may use U.S. subcontractors without limitation, but the use of subcontractors from Host Country may not exceed twenty percent (20%) of the USTDA Grant amount and may only be used for specific services from the Terms of Reference identified in the sub-agreement; (c) employees of the U.S. Firm or U.S. subcontractors responsible for professional services shall be U.S. citizens or non-U.S. citizens lawfully admitted for permanent residence in the U.S.; (d) goods purchased for performance of the Study and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and (e) goods and services incidental to Study support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions. USTDA will make available further details concerning these provisions upon request.

12. Taxes

USTDA funds provided under the Grant Agreement shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in Host Country. Neither the Grantee nor the U.S. Firm will seek reimbursement from USTDA for such taxes, tariffs, duties, fees or other levies.

13. Cooperation Between Parties and Follow-Up

The parties will cooperate to assure that the purposes of the Grant Agreement are accomplished. For five (5) years following receipt by USTDA of the Final Report (as defined in Clause I of Annex II), the Grantee agrees to respond to any reasonable inquiries from USTDA about the status of the Project.

14. Implementation Letters

To assist the Grantee in the implementation of the Study, USTDA may, from time to time, issue implementation letters that will provide additional information about matters covered by the Grant Agreement. The parties may also use jointly agreed upon implementation letters to confirm and record their mutual understanding of matters covered by the Grant Agreement.

15. Recordkeeping and Audit

The Grantee agrees to maintain books, records, and other documents relating to the Study and the Grant Agreement adequate to demonstrate implementation of its responsibilities under the Grant Agreement, including the selection of U.S. Firms, receipt and approval of Agreement of Understanding deliverables, and approval or disapproval of U.S. firm invoices for payment by USTDA. Such books, records, and other documents shall be separately maintained for three (3) years after the date of the final disbursement by USTDA. The Grantee shall afford USTDA or its authorized representatives the opportunity at reasonable times to review books, records, and other documents relating to the Study and the Grant Agreement.

16. Representation of Parties

For all purposes relevant to the Grant Agreement, the Government of the United States of America will be represented by the U. S. Ambassador to Host Country or USTDA and Grantee will be represented by the Secretary. The parties hereto may, by written notice, designate additional representatives for all purposes under the Grant Agreement.

17. Addresses of Record for Parties

Any notice, request, document, or other communication submitted by either party to the other under the Grant Agreement shall be in writing or through a wire or electronic medium which produces a tangible record of the transmission, such as a telegram, cable or facsimile, and will be deemed duly given or sent when delivered to such party at the following:

To: Secretaria de Desenvolvimento Econômico do Governo do Distrito Federal
Subsecretário de Investimentos e Negócios Internacionais

Centro de Convenções Ulysses Guimaraes, SDC
Eixo Monumental, Lote 5, Ala Norte, 1º andar
Brasília - DF CEP 70070-350

Phone: 011 55 (61) 3325-2427
Fax: 011 55 (61) 3321-3167

To: U.S. Trade and Development Agency
1000 Wilson Boulevard, Suite 1600
Arlington, Virginia 22209-3901
USA

Phone: (703) 875-4357
Fax: (703) 875-4009

All such communications shall be in English, unless the parties otherwise agree in writing. In addition, the Grantee shall provide the Commercial Section of the U.S. Embassy in Host Country with a copy of each communication sent to USTDA.

Any communication relating to this Grant Agreement shall include the following fiscal data:

Appropriation No.:	119/101001
Activity No.:	200951004A
Reservation No.:	2009510005
Grant No.:	GH2009510003

18. Termination Clause

Either party may terminate the Grant Agreement by giving the other party thirty (30) days advance written notice. The termination of the Grant Agreement will end any obligations of the parties to provide financial or other resources for the Study, except for payments which they are committed to make pursuant to noncancellable commitments entered into with third parties prior to the written notice of termination.

19. Non-waiver of Rights and Remedies

No delay in exercising any right or remedy accruing to either party in connection with the Grant Agreement shall be construed as a waiver of such right or remedy.

20. U.S. Technology and Equipment

By funding this Study, USTDA seeks to promote the project objectives of the Host Country through the use of U.S. technology, goods, and services. In recognition of this purpose, the Grantee agrees that it will allow U.S. suppliers to compete in the procurement of technology, goods and services needed for Project implementation.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Government of the United States of America and the Federal District of Brazil Secretariat for Economic Development and Tourism, each acting through its duly authorized representative, have caused this Agreement to be signed in the English language in their names and delivered as of the day and year written below. In the event that this Grant Agreement is signed in more than one language, the English language version shall govern.

For the Government of the United States of America

By: _____
Larry W. Walther
Director
U.S. Trade and Development Agency

Date: 12/10/08

Witnessed:

By: _____

For the Federal District of Brazil Secretariat for Economic Development and Tourism

By: _____
Jose Roberto Arruda
Governor
Federal District of Brazil

By: _____
Paulo Octavio Alves Pereira
Vice-Governor for the Federal District of Brazil and Secretary for the Secretariat for Economic Development and Tourism

Date: 12/10/08

Witnessed:

By: _____
Odilon Frazão
Subsecretário de Investimentos e Negócios Internacionais for the Federal District of Brazil Secretariat for Economic Development and Tourism

Annex I -- Terms of Reference

Annex II -- USTDA Mandatory Clauses

Annex I

Terms of Reference

Objective

The objective of the multi-sector technology park feasibility study is to evaluate a multi-sector technology park for the Government of the Federal District of Brazil (GDF) that will foster a favorable environment for innovation in the academic, research and private sectors.

The U.S. Firm that performs the Study, and that U.S. Firm's parent, subsidiaries, and affiliates, are prohibited from providing any goods or services covered by any bidding document developed in whole or in part during the performance of the Study.

The Study tasks are as follows:

TASK 1: PREPARATION AND BACKGROUND RESEARCH

The U.S. Firm shall research the Brazil ICT, science, education, and research sectors. This would include background information on various IT, technology, science, and education programs.

TASK 2: INITIAL VISIT AND ASSESSMENT OF CURRENT SITUATION

The U.S. Firm shall travel to Brasilia to familiarize itself with the current situation and to meet with the Grantee.

The U.S. Firm should also visit the successful technology parks (highlighted in the World Bank and AT Kearney Reports) in Rio de Janeiro, Sao Paulo, and Porto Alegre and learn about their operations, management, experience, and incubator programs.

The U.S. Firm should already be familiar with the Federal Public Private Partnership (PPP) legislation, science/technology and industry policy initiatives of Política Industrial, Tecnológica e de Comércio Exterior (PITCE), the Brazilian Innovation Agency (Financiadora de Estudos e Projetos - FINEP), Agência Brasileira de Desenvolvimento Industrial (ABDI), as well as Governmental public budget finance and project analysis.

TASK 3: CONDUCT A NEEDS/REQUIREMENT ANALYSIS FOR THE MULTI-SECTOR TECHNOLOGY PARK

In this task, the U.S. Firm shall create a needs analysis and requirement document that will be used in Task 4 to create the business model.

Deliverable: Needs and requirement assessment document.

TASK 4: DEVELOP FUNCTIONAL SPECIFICATIONS, ARCHITECTURE, AND BUSINESS MODEL

The U.S. Firm shall:

- Analyze the findings from Task 3 and develop specifications regarding the architecture and design of the Project.
- Develop estimates of network designs, equipment needs and capacity, and resulting capital expenditure and operating cost needs for the broadband infrastructure for the complex.
- Create a detailed operational model for the technology park and resulting data network, the management and security of the network and park, and the services needed.
- Provide technological definition through:
  - Analysis of the technological environment available and related trends,
  - Definition of the transfer of knowledge for the Grantee implementation team,
  - Definition of essential technical conditions and options for the Project,
  - Definition of Project metrics, performance, and other benchmarks to be used, and
  - Definition of technological standards to be followed.
- Provide a list of potential U.S. suppliers interested in participating in the Project.

The U.S. Firm shall design and develop a business model that takes into consideration the rapid and continuing technological evolution and convergence in the communications sector and its impact on the costs, pricing, and development of services. This model shall include a mechanism that makes it possible to plan for future technological change, enabling any private sector partner(s) to make the necessary investments and earn a reasonable return on these investments, while ensuring that the Project benefits the government and people of Brasilia.

Deliverable: Design, Technology Definitions, and Business Model.

TASK 5: ECONOMIC AND FINANCIAL ANALYSIS OF THE PROJECT

The U.S. Firm shall:

- Prepare estimates for rates of return for the park's initial investment costs, including the embedded data transmission, control and storage network and for common services buildings, and conduct a scenario analysis of trends, project risks and total cost
- Quantify the estimate for the amount of counterpart funds needed to be supplied by the GDF
- Analyze the budgetary and financial impacts of the Project
- Estimate the amount of investments (including the import content) by potential tenants over the first five years of the park's operations

- Assess all aspects of Project feasibility (technical, economic, financial, political, legal and organizational) and their interrelations
- Prepare economic scenarios, risk analysis, rate return analysis, and analysis of the total cost of operation for the first five years of park operations
- Quantify the economic development benefits to the region

Deliverable: Report on economic and financial analysis and interrelationships

TASK 6: ORGANIZATIONAL ISSUES

The U.S. Firm shall support the development of a professional human resource function designed to be an effective source of capacity building. Since the Grantee is the sponsor of the Project, the U.S. Firm in this task shall help design the organizational structure and requirements that would enable the Grantee to oversee the Project.

The U.S. Firm shall:

- Identify and prioritize corporate governance issues that are necessary and critical to support the business plan.
- Define the qualifications of the staff needed to carry out the Project.
- Define the respective roles and relationships of the staff to the university, government, or corporate anchor tenants.
- Identify the necessary staff support resources needed for work plan implementation.
- Create a mechanism for the Grantee to make use of available resources or personnel.
- Define the corporate governance structure.
- Establish metrics and benchmarks.
- Review current human capital deployment.
- Foster knowledge transfer and capacity building
    - Help prioritize professional training development needs and implement a regular training schedule,
    - Help create communities of practice, by encouraging the sharing of knowledge and information with staff members doing the same type of job, or staff members on different technical committees, as well as staff that previously worked in their areas, to share information, failures, and successes.

Deliverable: Human resources, knowledge transfer, and capacity building plan.

TASK 7: CONDUCT A PRELIMINARY ENVIRONMENTAL IMPACT ASSESSMENT

- Conduct a preliminary review and evaluation of the expected environmental impacts and their compatibility with both local regulations and the requirements of potential lending agencies, especially the World Bank, the IFC, and the IDB.
- Discuss how any potentially significant negative impacts can be minimized.
- Identify agency/department expectations, priorities, opportunities, and trends.
- Develop plans for full environmental impact assessment in anticipation of the Project moving forward to the implementation stage.

Deliverable: Preliminary environmental impact assessment report.

TASK 8: DEVELOPMENTAL IMPACT ANALYSIS

The U.S. Firm shall identify and assess the developmental outcomes that would be expected if the Project is implemented in accordance with the recommendations of the Study. The U.S. Firm shall focus on estimating the Project's potential benefits in any or all of four areas: additions to infrastructure or industrial capacity; nature and effects of any legal/regulatory changes resulting from the Project; expected human capacity building; and technology transfer and its effects. The analysis of potential developmental benefits should be as concrete and detailed as possible and include at least one specific example of developmental impact for each area that is relevant for the Project. Any significant developmental impacts outside the four areas listed above should also be included.

Deliverable: A report setting forth the findings and opinions as specified above.

TASK 9: PROJECT PLANNING AND IMPLEMENTATION

The U.S. Firm shall assess and determine whether the critical success factors for Project implementation have been met and the project risks identified have been accounted for and mitigated to the extent possible.

The critical success factors shall include the following:

- Training of Grantee personnel in the management of any outsourcing, service level agreements, etc.
- Support from top government managers.
- Establishment and application of penalties for non-compliance with any outsourcing contract conditions.
- Definition of a clear process for exiting from any outsourcing contract and transitioning to another supplier.
- Other critical success factors inherent in outsourcing processes for IT.

The Project implementation report shall recommend the most appropriate structure for the Project, summarize the steps that need to be undertaken by the Government to implement the Project according to the recommended structure, and analyze any regulatory or other steps involved with the creation of any new legal entity that may be required.

TASK 10: PREPARATION OF BIDDING DOCUMENTS

The U.S. Firm shall prepare one or more bidding documents (*Editals*) that cover all of the goods and services needed for Project implementation. The U.S. Firm shall prepare the *Edital(s)* in consultation with the Grantee. The U.S. Firm also shall develop a timetable for publicizing the *Edital(s),* and for awarding the contract(s) for the goods and services covered by the *Edital(s).* Every *Edital* must be fully consistent with the legal requirements of Brazil.

Deliverable: Complete draft of the *Edital(s),* ready for publication. The U.S. Firm shall provide copies of the *Edital(s)* in both English and Portuguese.

TASK 12: PRESENTATION AND FINAL REPORT

Upon concluding the tasks listed above, the U.S. Firm, while still in Brasilia, shall formally present to the Grantee the findings and recommendations and a draft version of the Final Report. The Grantee will be able to use this opportunity to ask questions or provide further comments and suggestions based on the presentation and the draft of the Final Report.

After the Presentation, the U.S. Firm shall make the final changes suggested by the Grantee and submit the Final Report. The U.S. Firm shall prepare and deliver to the Grantee and USTDA a substantive and comprehensive final report of all work performed under these Terms of Reference ("Final Report"). The Final Report shall be organized according to the above tasks, and shall include all deliverables and documents that have been provided to the Grantee. The Final Report shall be prepared in accordance with Clause I of Annex II of the Grant Agreement.

The U.S. Firm shall provide to the Grantee three (3) hard copies and one (1) electronic version of both the confidential and public versions of the Final Report in Portuguese and one (1) hard copy of both the confidential and public versions of the Final Report in English. The U.S. Firm also shall provide copies to USTDA and the U.S. Embassy in Brazil in accordance with Clause I of Annex II of the Grant Agreement.

Notes:

1) **The U.S. Firm is responsible for compliance with U.S. export licensing requirements, if applicable, in the performance of the Terms of Reference.**

2) **The U.S. Firm and the Grantee shall be careful to ensure that the public version of the Final Report contains no security or confidential information.**
3) **The Grantee and USTDA shall have an irrevocable, worldwide, royalty-free, non-exclusive right to use and distribute the Final Report and all work product that is developed under these Terms of Reference.**
4) **All deliverables shall be supplied in the English language. Additionally, the Final Report and presentation shall be translated into Portuguese. The U.S. Firm shall ensure the quality and accuracy of the translation.**

ADDITIONAL COMMENT

Successful execution of the FS presupposes that 1) the U.S. Firm establishes a close working relationship with the Grantee; 2) the U.S. Firm is prepared to spend the necessary amount of time on-site in-country; and 3) the U.S. Firm has appropriate access to government officials and personnel, resources and data. It is expected that candidate firms for carrying out the FS will address these issues in their proposals, both in general terms and in terms of specific requirements (e.g., for desk space, phone/fax, Internet connection).

Annex II

USTDA Mandatory Agreement of Understanding to Perform the Feasibility Study Clauses

A. USTDA Mandatory Clauses Controlling

The parties to this Agreement of Understanding to Perform the Feasibility Study ("Agreement of Understanding") acknowledge that this Agreement of Understanding is funded in whole or in part by the U.S. Trade and Development Agency ("USTDA") under the Grant Agreement between the Government of the United States of America acting through USTDA and the Federal District of Brazil Secretariat for Economic Development and Tourism ("Client"), dated _____ ("Grant Agreement"). The Client has selected _____ ("U.S. Firm") to perform the feasibility study ("Study") for the Multi-Sector Technology Park Project ("Project") in Brazil ("Host Country"). Notwithstanding any other provisions of this Agreement of Understanding, the following USTDA mandatory Agreement of Understanding clauses shall govern. All sub-agreements entered into by the U.S. Firm funded or partially funded with USTDA Grant funds shall include these USTDA mandatory Agreement of Understanding clauses, except for clauses B(1), G, H, I, and J. In addition, in the event of any inconsistency between the Grant Agreement and any Agreement of Understanding or sub-agreement thereunder, the Grant Agreement shall be controlling.

B. USTDA as Financier

(1) USTDA Approval of Agreement of Understanding

All agreements of understanding funded under the Grant Agreement, and any amendments thereto, including assignments and changes in the Terms of Reference, must be approved by USTDA in writing in order to be effective with respect to the expenditure of USTDA Grant funds. USTDA will not authorize the disbursement of USTDA Grant funds until the Agreement of Understanding has been formally approved by USTDA or until the Agreement of Understanding conforms to modifications required by USTDA during the Agreement of Understanding review process.

(2) USTDA Not a Party to the Agreement of Understanding

It is understood by the parties that USTDA has reserved certain rights such as, but not limited to, the right to approve the terms of this Agreement of Understanding and amendments thereto, including assignments, the selection of all U.S. Firms, the Terms of Reference, the Final Report, and any and all documents related to any Agreement of Understanding funded under the Grant Agreement. The parties hereto further understand and agree that USTDA, in reserving any or all of the foregoing approval rights, has acted solely as a financing entity to assure the proper use of United States Government funds, and that any decision by USTDA to exercise or refrain from

exercising these approval rights shall be made as a financier in the course of financing the Study and shall not be construed as making USTDA a party to the Agreement of Understanding. The parties hereto understand and agree that USTDA may, from time to time, exercise the foregoing approval rights, or discuss matters related to these rights and the Project with the parties to the Agreement of Understanding or any sub-agreement, jointly or separately, without thereby incurring any responsibility or liability to such parties. Any approval or failure to approve by USTDA shall not bar the Client or USTDA from asserting any right they might have against the U.S. Firm, or relieve the U.S. Firm of any liability which the U.S. Firm might otherwise have to the Client or USTDA.

C. Nationality, Source and Origin

Except as USTDA may otherwise agree, the following provisions shall govern the delivery of goods and services funded by USTDA under the Grant Agreement: (a) for professional services, the U.S. Firm must be either a U.S. firm or U.S. individual; (b) the U.S. Firm may use U.S. subcontractors without limitation, but the use of subcontractors from Host Country may not exceed twenty percent (20%) of the USTDA Grant amount and may only be used for specific services from the Terms of Reference identified in the subcontract; (c) employees of the U.S. Firm or U.S. subcontractors responsible for professional services shall be U.S. citizens or non-U.S. citizens lawfully admitted for permanent residence in the U.S.; (d) goods purchased for performance of the Study and associated delivery services (e.g., international transportation and insurance) must have their nationality, source and origin in the United States; and (e) goods and services incidental to Study support (e.g., local lodging, food, and transportation) in Host Country are not subject to the above restrictions. USTDA will make available further details concerning these provisions upon request.

D. Recordkeeping and Audit

The U.S. Firm and subcontractors funded under the Grant Agreement shall maintain, in accordance with generally accepted accounting procedures, books, records, and other documents, sufficient to reflect properly all transactions under or in connection with the Agreement of Understanding. These books, records, and other documents shall clearly identify and track the use and expenditure of USTDA funds, separately from other funding sources. Such books, records, and documents shall be maintained during the Agreement of Understanding term and for a period of three (3) years after final disbursement by USTDA. The U.S. Firm and subcontractors shall afford USTDA, or its authorized representatives, the opportunity at reasonable times for inspection and audit of such books, records, and other documentation.

E. U.S. Carriers

(1) Air

Transportation by air of persons or property funded under the Grant Agreement shall be on U.S. flag carriers in accordance with the Fly America Act, 49 U.S.C. 40118, to the extent service by such carriers is available, as provided under applicable U.S. Government regulations.

(2) Marine

Transportation by sea of property funded under the Grant Agreement shall be on U.S. carriers in accordance with U.S. cargo preference law.

F. Workman's Compensation Insurance

The U.S. Firm shall provide adequate Workman's Compensation Insurance coverage for work performed under this Agreement of Understanding.

G. Reporting Requirements

The U.S. Firm shall advise USTDA by letter as to the status of the Project on March 1st annually for a period of two (2) years after completion of the Study. In addition, if at any time the U.S. Firm receives follow-on work from the Client, the U.S. Firm shall so notify USTDA and designate the U.S. Firm's contact point including name, telephone, and fax number. Since this information may be made publicly available by USTDA, any information which is confidential shall be designated as such by the U.S. Firm and provided separately to USTDA. USTDA will maintain the confidentiality of such information in accordance with applicable law.

H. Disbursement Procedures

(1) USTDA Approval of Agreement of Understanding

Disbursement of Grant funds will be made only after USTDA approval of this Agreement of Understanding. To make this review in a timely fashion, USTDA must receive from either the Client or the U.S. Firm a photocopy of an English language version of a signed Agreement of Understanding or a final negotiated draft version to the attention of the General Counsel's office at USTDA's address listed in Clause M below.

(2) Payment Schedule Requirements

A payment schedule for disbursement of Grant funds to the U.S. Firm shall be included in this Agreement of Understanding. Such payment schedule must conform to the following USTDA requirements: (1) up to twenty percent (20%) of the total USTDA Grant amount may be used as a mobilization payment; (2) all other payments, with the exception of the final payment, shall be based upon Agreement of Understanding performance milestones; and (3) the final payment may be no less than fifteen percent (15%) of the total USTDA Grant amount, payable upon receipt by USTDA of an approved Final Report in accordance with the specifications and quantities set forth in Clause I below. Invoicing procedures for all payments are described below.

(3) U.S. Firm Invoice Requirements

USTDA will make all disbursements of USTDA Grant funds directly to the U.S. Firm. The U.S. Firm must provide USTDA with an ACH Vendor Enrollment Form (available from USTDA) with the first invoice. The Client shall request disbursement of funds by USTDA to the U.S. Firm for performance of the contract by submitting the following to USTDA:

(a) U.S. Firm's Invoice

The U.S. Firm's invoice shall include reference to an item listed in the Contract payment schedule, the requested payment amount, and an appropriate certification by the U.S. Firm, as follows:

(i) For a mobilization payment (if any):

"As a condition for this mobilization payment, the U.S. Firm certifies that it will perform all work in accordance with the terms of its Agreement of Understanding with the Client. To the extent that the U.S. Firm does not comply with the terms and conditions of the Agreement of Understanding, including the USTDA mandatory provisions contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA. "

(ii) For Agreement of Understanding performance milestone payments:

"The U.S. Firm has performed the work described in this invoice in accordance with the terms of its Agreement of Understanding with the Client and is entitled to payment thereunder. To the extent the U.S. Firm has not complied with the terms and conditions of the Agreement of Understanding, including the USTDA mandatory provisions contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA."

(iii) For final payment:

"The U.S. Firm has performed the work described in this invoice in accordance with the terms of its Agreement of Understanding with the Client and is entitled to payment thereunder. Specifically, the U.S. Firm has submitted the Final Report to the Client, as required by the Agreement of Understanding, and received the Client's approval of the Final Report. To the extent the U.S. Firm has not complied with the terms and conditions of the Agreement of Understanding, including the USTDA mandatory provisions contained therein, it will, upon USTDA's request, make an appropriate refund to USTDA."

(b) Client's Approval of the U.S. Firm's Invoice

(i) The invoice for a mobilization payment must be approved in writing by the Client.

(ii) For Agreement of Understanding performance milestone payments, the following certification by the Client must be provided on the invoice or separately:

"The services for which disbursement is requested by the U.S. Firm have been performed satisfactorily, in accordance with applicable Agreement of Understanding provisions and the terms and conditions of the USTDA Grant Agreement."

(iii) For final payment, the following certification by the Client must be provided on the invoice or separately:

"The services for which disbursement is requested by the U.S. Firm have been performed satisfactorily, in accordance with applicable Agreement of Understanding provisions and terms and conditions of the USTDA Grant Agreement. The Final Report submitted by the U.S. Firm has been reviewed and approved by the Client. "

(c) USTDA Address for Disbursement Requests

Requests for disbursement shall be submitted by courier or mail to the attention of the Finance Department at USTDA's address listed in Clause M below.

(4) Termination

In the event that the Agreement of Understanding is terminated prior to completion, the U.S. Firm will be eligible, subject to USTDA approval, for reasonable and documented costs which have been incurred in performing the Terms of Reference prior to termination, as well as reasonable wind down expenses. Reimbursement for such costs shall not exceed the total amount of undisbursed Grant funds. Likewise, in

the event of such termination, USTDA is entitled to receive from the U.S. Firm all USTDA Grant funds previously disbursed to the U.S. Firm (including but not limited to mobilization payments) which exceed the reasonable and documented costs incurred in performing the Terms of Reference prior to termination.

I. USTDA Final Report

(1) Definition

"Final Report" shall mean the Final Report described in the attached Annex I Terms of Reference or, if no such "Final Report" is described therein, "Final Report" shall mean a substantive and comprehensive report of work performed in accordance with the attached Annex I Terms of Reference, including any documents delivered to the Client.

(2) Final Report Submission Requirements

The U.S. Firm shall provide the following to USTDA:

(a) One (1) complete version of the Final Report for USTDA's records. This version shall have been approved by the Client in writing and must be in the English language. It is the responsibility of the U.S. Firm to ensure that confidential information, if any, contained in this version be clearly marked. USTDA will maintain the confidentiality of such information in accordance with applicable law.

and

(b) One (1) copy of the Final Report suitable for public distribution ("Public Version"). The Public Version shall have been approved by the Client in writing and must be in the English language. As this version will be available for public distribution, it must not contain any confidential information. If the report in (a) above contains no confidential information, it may be used as the Public Version. In any event, the Public Version must be informative and contain sufficient Project detail to be useful to prospective equipment and service providers.

and

(c) Two (2) CD-ROMs, each containing a complete copy of the Public Version of the Final Report. The electronic files on the CD-ROMs shall be submitted in a commonly accessible read-only format. As these CD-ROMs will be available for public distribution, they must not contain any confidential information. It is the responsibility of the U.S. Firm to ensure that no confidential information is contained on the CD-ROMs.

The U.S. Firm shall also provide one (1) copy of the Public Version of the Final Report to the Foreign Commercial Service Officer or the Economic Section of the U.S. Embassy in Host Country for informational purposes.

(3) Final Report Presentation

All Final Reports submitted to USTDA must be paginated and include the following:

(a) The front cover of every Final Report shall contain the name of the Client, the name of the U.S. Firm who prepared the report, a report title, USTDA's logo, USTDA's mailing and delivery addresses. If the complete version of the Final Report contains confidential information, the U.S. Firm shall be responsible for labeling the front cover of that version of the Final Report with the term "Confidential Version." The U.S. Firm shall be responsible for labeling the front cover of the Public Version of the Final Report with the term "Public Version." The front cover of every Final Report shall also contain the following disclaimer:

> "This report was funded by the U.S. Trade and Development Agency (USTDA), an agency of the U. S. Government. The opinions, findings, conclusions or recommendations expressed in this document are those of the author(s) and do not necessarily represent the official position or policies of USTDA. USTDA makes no representation about, nor does it accept responsibility for, the accuracy or completeness of the information contained in this report."

(b) The inside front cover of every Final Report shall contain USTDA's logo, USTDA's mailing and delivery addresses, and USTDA's mission statement. Camera-ready copy of USTDA Final Report specifications will be available from USTDA upon request.

(c) The U.S. Firm shall affix to the front of the CD-ROM a label identifying the Host Country, USTDA Activity Number, the name of the Client, the name of the U.S. Firm who prepared the report, a report title, and the following language:

> "The U.S. Firm certifies that this CD-ROM contains the Public Version of the Final Report and that all contents are suitable for public distribution."

(d) The U.S. Firm and any subcontractors that perform work pursuant to the Grant Agreement must be clearly identified in the Final Report. Business name, point of contact, address, telephone and fax numbers shall be included for U.S. Firm and each subcontractor.

(e) The Final Report, while aiming at optimum specifications and characteristics for the Project, shall identify the availability of prospective U.S. sources of supply. Business name, point of contact, address, telephone and fax numbers shall be included for each commercial source.

(f) The Final Report shall be accompanied by a letter or other notation by the Client which states that the Client approves the Final Report. A certification by the Client to this effect provided on or with the invoice for final payment will meet this requirement.

J. Modifications

All changes, modifications, assignments or amendments to this Agreement of Understanding, including the appendices, shall be made only by written agreement by the parties hereto, subject to written USTDA approval.

K. Study Schedule

(1) Study Completion Date

The completion date for the Study, which is December 31, 2009, is the date by which the parties estimate that the Study will have been completed.

(2) Time Limitation on Disbursement of USTDA Grant Funds

Except as USTDA may otherwise agree, (a) no USTDA funds may be disbursed under this Agreement of Understanding for goods and services which are provided prior to the Effective Date of the Grant Agreement; and (b) all funds made available under the Grant Agreement must be disbursed within four (4) years from the Effective Date of the Grant Agreement.

L. Business Practices

The U.S. Firm agrees not to pay, promise to pay, or authorize the payment of any money or anything of value, directly or indirectly, to any person (whether a governmental official or private individual) for the purpose of illegally or improperly inducing anyone to take any action favorable to any party in connection with the Study. The Client agrees not to receive any such payment. The U.S. Firm and the Client agree that each will require that any agent or representative hired to represent them in connection with the Study will comply with this paragraph and all laws which apply to activities and obligations of each party under this Agreement of Understanding, including but not limited to those laws and obligations dealing with improper payments as described above.

M. USTDA Address and Fiscal Data

Any communication with USTDA regarding this Agreement of Understanding shall be sent to the following address and include the fiscal data listed below:

U.S. Trade and Development Agency
1000 Wilson Boulevard, Suite 1600
Arlington, Virginia 22209-3901
USA

Phone: (703) 875-4357
Fax: (703) 875-4009

Fiscal Data:

Appropriation No.:	119/101001
Activity No.:	200951004A
Reservation No.:	2009510005
Grant No.:	GH2009510003

N. Definitions

All capitalized terms not otherwise defined herein shall have the meaning set forth in the Grant Agreement.

O. Taxes

USTDA funds provided under the Grant Agreement shall not be used to pay any taxes, tariffs, duties, fees or other levies imposed under laws in effect in Host Country. Neither the Client nor the U.S. Firm will seek reimbursement from USTDA for such taxes, tariffs, duties, fees or other levies.

ANNEX 5

Annex I

Terms of Reference

Objective

The objective of the multi-sector technology park feasibility study is to evaluate a multi-sector technology park for the Government of the Federal District of Brazil (GDF) that will foster a favorable environment for innovation in the academic, research and private sectors.

The U.S. Firm that performs the Study, and that U.S. Firm's parent, subsidiaries, and affiliates, are prohibited from providing any goods or services covered by any bidding document developed in whole or in part during the performance of the Study.

The Study tasks are as follows:

TASK 1: PREPARATION AND BACKGROUND RESEARCH

The U.S. Firm shall research the Brazil ICT, science, education, and research sectors. This would include background information on various IT, technology, science, and education programs.

TASK 2: INITIAL VISIT AND ASSESSMENT OF CURRENT SITUATION

The U.S. Firm shall travel to Brasilia to familiarize itself with the current situation and to meet with the Grantee.

The U.S. Firm should also visit the successful technology parks (highlighted in the World Bank and AT Kearney Reports) in Rio de Janeiro, Sao Paulo, and Porto Alegre and learn about their operations, management, experience, and incubator programs.

The U.S. Firm should already be familiar with the Federal Public Private Partnership (PPP) legislation, science/technology and industry policy initiatives of Política Industrial, Tecnológica e de Comércio Exterior (PITCE), the Brazilian Innovation Agency (Financiadora de Estudos e Projetos - FINEP), Agência Brasileira de Desenvolvimento Industrial (ABDI), as well as Governmental public budget finance and project analysis.

TASK 3: CONDUCT A NEEDS/REQUIREMENT ANALYSIS FOR THE MULTI-SECTOR TECHNOLOGY PARK

In this task, the U.S. Firm shall create a needs analysis and requirement document that will be used in Task 4 to create the business model.

Deliverable: Needs and requirement assessment document.

TASK 4: DEVELOP FUNCTIONAL SPECIFICATIONS, ARCHITECTURE, AND BUSINESS MODEL

The U.S. Firm shall:

- Analyze the findings from Task 3 and develop specifications regarding the architecture and design of the Project.
- Develop estimates of network designs, equipment needs and capacity, and resulting capital expenditure and operating cost needs for the broadband infrastructure for the complex.
- Create a detailed operational model for the technology park and resulting data network, the management and security of the network and park, and the services needed.
- Provide technological definition through:
    - Analysis of the technological environment available and related trends,
    - Definition of the transfer of knowledge for the Grantee implementation team,
    - Definition of essential technical conditions and options for the Project,
    - Definition of Project metrics, performance, and other benchmarks to be used, and
    - Definition of technological standards to be followed.
- Provide a list of potential U.S. suppliers interested in participating in the Project.

The U.S. Firm shall design and develop a business model that takes into consideration the rapid and continuing technological evolution and convergence in the communications sector and its impact on the costs, pricing, and development of services. This model shall include a mechanism that makes it possible to plan for future technological change, enabling any private sector partner(s) to make the necessary investments and earn a reasonable return on these investments, while ensuring that the Project benefits the government and people of Brasilia.

Deliverable: Design, Technology Definitions, and Business Model.

TASK 5: ECONOMIC AND FINANCIAL ANALYSIS OF THE PROJECT

The U.S. Firm shall:

- Prepare estimates for rates of return for the park's initial investment costs, including the embedded data transmission, control and storage network and for common services buildings, and conduct a scenario analysis of trends, project risks and total cost
- Quantify the estimate for the amount of counterpart funds needed to be supplied by the GDF
- Analyze the budgetary and financial impacts of the Project
- Estimate the amount of investments (including the import content) by potential tenants over the first five years of the park's operations

- Assess all aspects of Project feasibility (technical, economic, financial, political, legal and organizational) and their interrelations
- Prepare economic scenarios, risk analysis, rate return analysis, and analysis of the total cost of operation for the first five years of park operations
- Quantify the economic development benefits to the region

Deliverable: Report on economic and financial analysis and interrelationships

TASK 6: ORGANIZATIONAL ISSUES

The U.S. Firm shall support the development of a professional human resource function designed to be an effective source of capacity building. Since the Grantee is the sponsor of the Project, the U.S. Firm in this task shall help design the organizational structure and requirements that would enable the Grantee to oversee the Project.

The U.S. Firm shall:

- Identify and prioritize corporate governance issues that are necessary and critical to support the business plan.
- Define the qualifications of the staff needed to carry out the Project.
- Define the respective roles and relationships of the staff to the university, government, or corporate anchor tenants.
- Identify the necessary staff support resources needed for work plan implementation.
- Create a mechanism for the Grantee to make use of available resources or personnel.
- Define the corporate governance structure.
- Establish metrics and benchmarks.
- Review current human capital deployment.
- Foster knowledge transfer and capacity building
    - Help prioritize professional training development needs and implement a regular training schedule,
    - Help create communities of practice, by encouraging the sharing of knowledge and information with staff members doing the same type of job, or staff members on different technical committees, as well as staff that previously worked in their areas, to share information, failures, and successes.

Deliverable: Human resources, knowledge transfer, and capacity building plan.

TASK 7: CONDUCT A PRELIMINARY ENVIRONMENTAL IMPACT ASSESSMENT

- Conduct a preliminary review and evaluation of the expected environmental impacts and their compatibility with both local regulations and the requirements of potential lending agencies, especially the World Bank, the IFC, and the IDB.
- Discuss how any potentially significant negative impacts can be minimized.
- Identify agency/department expectations, priorities, opportunities, and trends.
- Develop plans for full environmental impact assessment in anticipation of the Project moving forward to the implementation stage.

Deliverable: Preliminary environmental impact assessment report.

TASK 8: DEVELOPMENTAL IMPACT ANALYSIS

The U.S. Firm shall identify and assess the developmental outcomes that would be expected if the Project is implemented in accordance with the recommendations of the Study. The U.S. Firm shall focus on estimating the Project's potential benefits in any or all of four areas: additions to infrastructure or industrial capacity; nature and effects of any legal/regulatory changes resulting from the Project; expected human capacity building; and technology transfer and its effects. The analysis of potential developmental benefits should be as concrete and detailed as possible and include at least one specific example of developmental impact for each area that is relevant for the Project. Any significant developmental impacts outside the four areas listed above should also be included.

Deliverable: A report setting forth the findings and opinions as specified above.

TASK 9: PROJECT PLANNING AND IMPLEMENTATION

The U.S. Firm shall assess and determine whether the critical success factors for Project implementation have been met and the project risks identified have been accounted for and mitigated to the extent possible.

The critical success factors shall include the following:

- Training of Grantee personnel in the management of any outsourcing, service level agreements, etc.
- Support from top government managers.
- Establishment and application of penalties for non-compliance with any outsourcing contract conditions.
- Definition of a clear process for exiting from any outsourcing contract and transitioning to another supplier.
- Other critical success factors inherent in outsourcing processes for IT.

The Project implementation report shall recommend the most appropriate structure for the Project, summarize the steps that need to be undertaken by the Government to implement the Project according to the recommended structure, and analyze any regulatory or other steps involved with the creation of any new legal entity that may be required.

TASK 10: PREPARATION OF BIDDING DOCUMENTS

The U.S. Firm shall prepare one or more bidding documents (*Editals*) that cover all of the goods and services needed for Project implementation. The U.S. Firm shall prepare the *Edital(s)* in consultation with the Grantee. The U.S. Firm also shall develop a timetable for publicizing the *Edital(s),* and for awarding the contract(s) for the goods and services covered by the *Edital(s).* Every *Edital* must be fully consistent with the legal requirements of Brazil.

Deliverable: Complete draft of the *Edital(s),* ready for publication. The U.S. Firm shall provide copies of the *Edital(s)* in both English and Portuguese.

TASK 12: PRESENTATION AND FINAL REPORT

Upon concluding the tasks listed above, the U.S. Firm, while still in Brasilia, shall formally present to the Grantee the findings and recommendations and a draft version of the Final Report. The Grantee will be able to use this opportunity to ask questions or provide further comments and suggestions based on the presentation and the draft of the Final Report.

After the Presentation, the U.S. Firm shall make the final changes suggested by the Grantee and submit the Final Report. The U.S. Firm shall prepare and deliver to the Grantee and USTDA a substantive and comprehensive final report of all work performed under these Terms of Reference ("Final Report"). The Final Report shall be organized according to the above tasks, and shall include all deliverables and documents that have been provided to the Grantee. The Final Report shall be prepared in accordance with Clause I of Annex II of the Grant Agreement.

The U.S. Firm shall provide to the Grantee three (3) hard copies and one (1) electronic version of both the confidential and public versions of the Final Report in Portuguese and one (1) hard copy of both the confidential and public versions of the Final Report in English. The U.S. Firm also shall provide copies to USTDA and the U.S. Embassy in Brazil in accordance with Clause I of Annex II of the Grant Agreement.

Notes:

1) **The U.S. Firm is responsible for compliance with U.S. export licensing requirements, if applicable, in the performance of the Terms of Reference.**

2) **The U.S. Firm and the Grantee shall be careful to ensure that the public version of the Final Report contains no security or confidential information.**
3) **The Grantee and USTDA shall have an irrevocable, worldwide, royalty-free, non-exclusive right to use and distribute the Final Report and all work product that is developed under these Terms of Reference.**
4) **All deliverables shall be supplied in the English language. Additionally, the Final Report and presentation shall be translated into Portuguese. The U.S. Firm shall ensure the quality and accuracy of the translation.**

ADDITIONAL COMMENT

Successful execution of the FS presupposes that 1) the U.S. Firm establishes a close working relationship with the Grantee; 2) the U.S. Firm is prepared to spend the necessary amount of time on-site in-country; and 3) the U.S. Firm has appropriate access to government officials and personnel, resources and data. It is expected that candidate firms for carrying out the FS will address these issues in their proposals, both in general terms and in terms of specific requirements (e.g., for desk space, phone/fax, Internet connection).